Isocitrate          Glyoxylate          Succinate

# FIG. 1A



3-bromopyruvate

# FIG. 1B
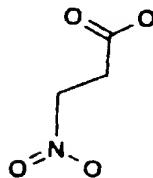


3-nitropropionate

# FIG. 1C

**FIG. 1D**

**FIG. 1E**

**FIG. 1F**

**FIG. 1G**
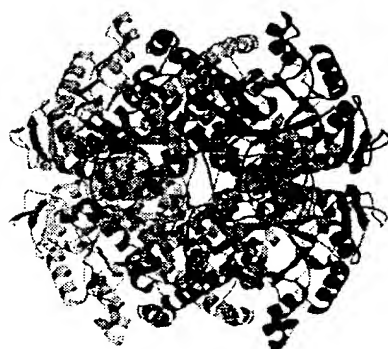
**FIG. 2A**
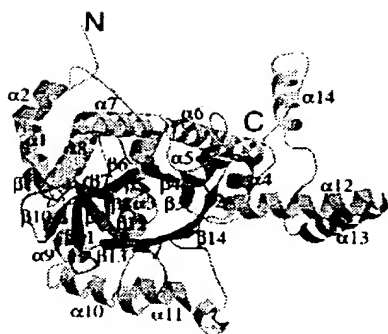


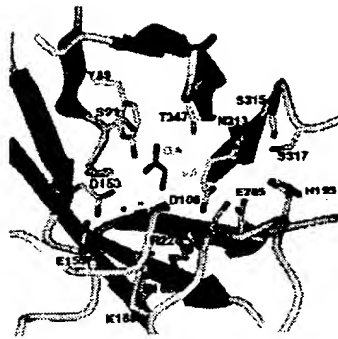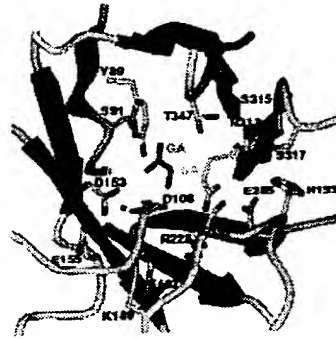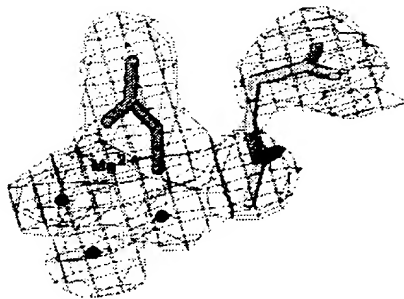**FIG. 2B**
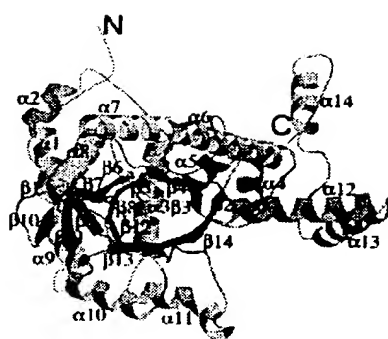
**FIG. 2C**

FIG. 3A



FIG. 3B



FIG. 3C
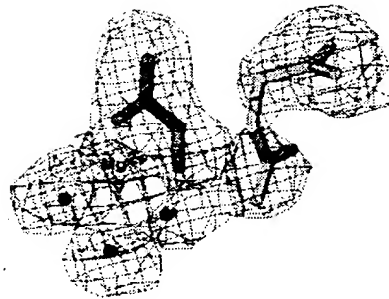


FIG. 3D
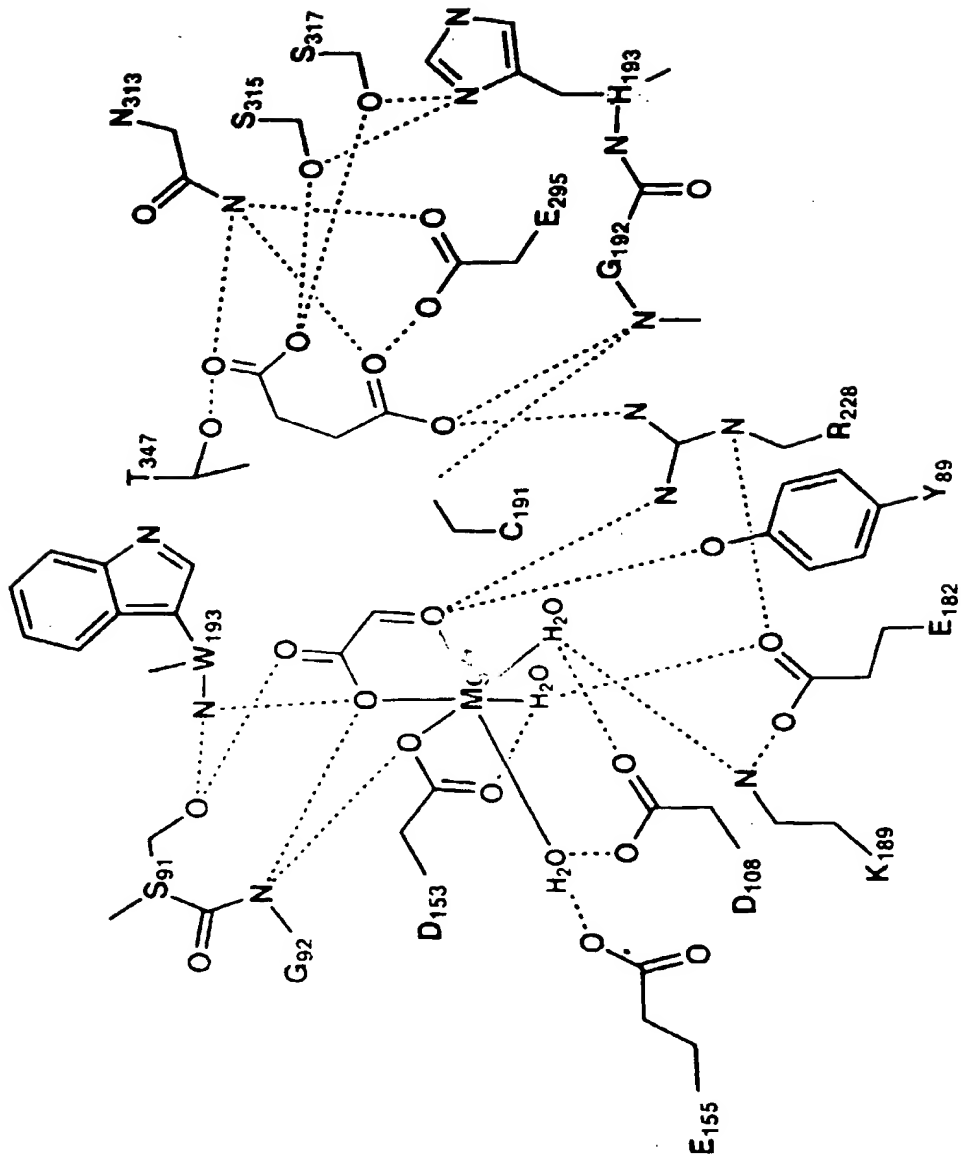
FIG. 3E
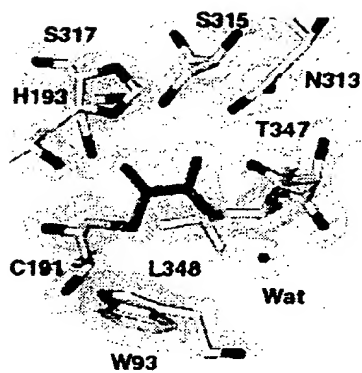
**FIG. 4A**
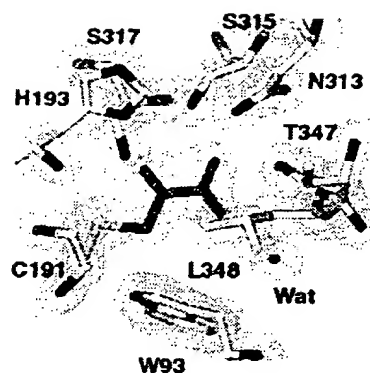
**FIG. 4B**



**FIG. 4C**
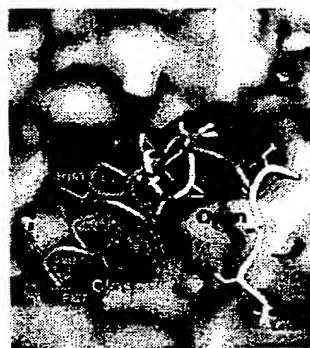
**FIG. 4D**

```
HEADER    LYASE                                      19-JUN-00   1F61
TITLE     CRYSTAL STRUCTURE OF ISOCITRATE LYASE FROM MYCOBACTERIUM
TITLE    2 TUBERCULOSIS
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: ISOCITRATE LYASE;
COMPND   3 CHAIN: A, B;
COMPND   4 EC: 4.1.3.1;
COMPND   5 ENGINEERED: YES
SOURCE    MOL_ID: 1;
SOURCE   2 ORGANISM_SCIENTIFIC: MYCOBACTERIUM TUBERCULOSIS;
SOURCE   3 STRAIN: H37RV;
SOURCE   4 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE   5 EXPRESSION_SYSTEM_COMMON: BACTERIA;
SOURCE   6 EXPRESSION_SYSTEM_VECTOR_TYPE: PLASMID;
SOURCE   7 EXPRESSION_SYSTEM_PLASMID: PET30B
KEYWDS    ALPHA-BETA BARREL, SWAPPED HELICES, APO-ENZYME, OPEN
KEYWDS   2 CONFORMATION
EXPDTA    X-RAY DIFFRACTION
AUTHOR    V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,D.G.RUSSELL,
AUTHOR   2 W.R.JACOBS JR.,J.C.SACCHETTINI
REVDAT   1   30-AUG-00 1F61    0
JRNL        AUTH   V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,
JRNL        AUTH 2 D.G.RUSSELL,W.R.JACOBS JR.,J.C.SACCHETTINI
JRNL        TITL   STRUCTURE OF ISOCITRATE LYASE, A PERSISTENCE
JRNL        TITL 2 FACTOR OF MYCOBACTERIUM TUBERCULOSIS
JRNL        REF    NAT.STRUCT.BIOL.              V.   7   663 2000
JRNL        REFN   ASTM NSBIEW   US ISSN 1072-8368
REMARK   1
REMARK   2
REMARK   2 RESOLUTION. 2.00 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : CNS 1.0
REMARK   3   AUTHORS     : BRUNGER,ADAMS,CLORE,DELANO,GROS,GROSSE-
REMARK   3               : KUNSTLEVE,JIANG,KUSZEWSKI,NILGES, PANNU,
REMARK   3               : READ,RICE,SIMONSON,WARREN
REMARK   3
REMARK   3   REFINEMENT TARGET : ENGH & HUBER
REMARK   3
REMARK   3   DATA USED IN REFINEMENT.
REMARK   3    RESOLUTION RANGE HIGH (ANGSTROMS) : 2.00
REMARK   3    RESOLUTION RANGE LOW  (ANGSTROMS) : 20.00
REMARK   3    DATA CUTOFF            (SIGMA(F)) : 2.000
REMARK   3    OUTLIER CUTOFF HIGH (RMS(ABS(F))) : NULL
REMARK   3    COMPLETENESS (WORKING+TEST)  (%) : 88.0
REMARK   3    NUMBER OF REFLECTIONS             : 77576
REMARK   3
REMARK   3
REMARK   3   FIT TO DATA USED IN REFINEMENT.
REMARK   3    CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3    FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3    R VALUE            (WORKING SET) : 0.165
REMARK   3    FREE R VALUE                     : 0.191
REMARK   3    FREE R VALUE TEST SET SIZE   (%) : 10.000
REMARK   3    FREE R VALUE TEST SET COUNT      : 8587
REMARK   3    ESTIMATED ERROR OF FREE R VALUE  : 0.002
REMARK   3
REMARK   3   FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3    TOTAL NUMBER OF BINS USED          : 6
REMARK   3    BIN RESOLUTION RANGE HIGH     (A) : 2.00
REMARK   3    BIN RESOLUTION RANGE LOW      (A) : 2.13
REMARK   3    BIN COMPLETENESS (WORKING+TEST) (%) : 86.10
REMARK   3    REFLECTIONS IN BIN   (WORKING SET) : 12410
REMARK   3    BIN R VALUE          (WORKING SET) : 0.2110
REMARK   3    BIN FREE R VALUE                   : 0.2440
REMARK   3    BIN FREE R VALUE TEST SET SIZE (%) : 10.10
REMARK   3    BIN FREE R VALUE TEST SET COUNT    : 1389
REMARK   3    ESTIMATED ERROR OF BIN FREE R VALUE : 0.007
REMARK   3
REMARK   3   NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3    PROTEIN ATOMS          : 6486
REMARK   3    NUCLEIC ACID ATOMS     : 0
REMARK   3    HETEROGEN ATOMS        : 2
REMARK   3    SOLVENT ATOMS          : 692
REMARK   3
REMARK   3   B VALUES.
REMARK   3    FROM WILSON PLOT           (A**2) : 21.20
REMARK   3    MEAN B VALUE       (OVERALL, A**2) : 30.90
REMARK   3    OVERALL ANISOTROPIC B VALUE.
REMARK   3     B11 (A**2) : 3.26000
```

```
REMARK   3     B22 (A**2) : 3.26000
REMARK   3     B33 (A**2) : -6.51000
REMARK   3     B12 (A**2) : 1.66000
REMARK   3     B13 (A**2) : 0.00000
REMARK   3     B23 (A**2) : 0.00000
REMARK   3
REMARK   3   ESTIMATED COORDINATE ERROR.
REMARK   3    ESD FROM LUZZATI PLOT        (A) : 0.19
REMARK   3    ESD FROM SIGMAA              (A) : 0.150
REMARK   3    LOW RESOLUTION CUTOFF        (A) : 5.00
REMARK   3
REMARK   3   CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3    ESD FROM C-V LUZZATI PLOT    (A) : 0.23
REMARK   3    ESD FROM C-V SIGMAA          (A) : 0.18
REMARK   3
REMARK   3   RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3    BOND LENGTHS                 (A) : 0.015
REMARK   3    BOND ANGLES            (DEGREES) : 1.60
REMARK   3    DIHEDRAL ANGLES        (DEGREES) : 22.70
REMARK   3    IMPROPER ANGLES        (DEGREES) : 1.04
REMARK   3
REMARK   3   ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3   ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS     SIGMA
REMARK   3    MAIN-CHAIN BOND           (A**2) : 0.75  ; 1.500
REMARK   3    MAIN-CHAIN ANGLE          (A**2) : 1.21  ; 2.000
REMARK   3    SIDE-CHAIN BOND           (A**2) : 1.22  ; 2.000
REMARK   3    SIDE-CHAIN ANGLE          (A**2) : 1.87  ; 2.500
REMARK   3
REMARK   3
REMARK   3   BULK SOLVENT MODELING.
REMARK   3    METHOD USED : FLAT MODEL
REMARK   3    KSOL        : 0.39
REMARK   3    BSOL        : 54.25
REMARK   3
REMARK   3   NCS MODEL : CONSTR
REMARK   3
REMARK   3   NCS RESTRAINTS.                         RMS    SIGMA/WEIGHT
REMARK   3    GROUP  1  POSITIONAL         (A) : NULL  ; NULL
REMARK   3    GROUP  1  B-FACTOR        (A**2) : NULL  ; NULL
REMARK   3
REMARK   3   PARAMETER FILE  1  : PROTEIN_REP.PARAM
REMARK   3   PARAMETER FILE  2  : ION.PARAM
REMARK   3   PARAMETER FILE  3  : WATER_REP.PARAM
REMARK   3   TOPOLOGY FILE   1  : PROTEIN.TOP
REMARK   3   TOPOLOGY FILE   2  : ION.TOP
REMARK   3   TOPOLOGY FILE   3  : WATER.TOP
REMARK   3
REMARK   3   OTHER REFINEMENT REMARKS: NULL
REMARK   4
REMARK   4 1F61 COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 21-JUN-2000.
REMARK 100 THE RCSB ID CODE IS RCSB011286.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE                : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION        : 13-APR-1999; 13-JUN-1999
REMARK 200  TEMPERATURE          (KELVIN) : 100.0; 100.0
REMARK 200  PH                             : 8.00
REMARK 200  NUMBER OF CRYSTALS USED        : 1
REMARK 200
REMARK 200  SYNCHROTRON            (Y/N) : Y; Y
REMARK 200  RADIATION SOURCE               : APS ; APS
REMARK 200  BEAMLINE                       : 19ID; 14BMD
REMARK 200  X-RAY GENERATOR MODEL          : NULL
REMARK 200  MONOCHROMATIC OR LAUE   (M/L) : M
REMARK 200  WAVELENGTH OR RANGE       (A) : 0.9791; 0.9798
REMARK 200  MONOCHROMATOR                  : NULL
REMARK 200  OPTICS                         : NULL
REMARK 200
REMARK 200  DETECTOR TYPE                  : CCD; CCD
REMARK 200  DETECTOR MANUFACTURER          : ADSC QUANTUM 1; 3K X 3K
REMARK 200                                   AT APS
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : DENZO
REMARK 200  DATA SCALING SOFTWARE          : SCALEPACK
REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS   : 97699
REMARK 200  RESOLUTION RANGE HIGH     (A) : 2.000
REMARK 200  RESOLUTION RANGE LOW      (A) : 20.000
```

```
REMARK 200   REJECTION CRITERIA  (SIGMA(I))  : -3.000
REMARK 200
REMARK 200 OVERALL.
REMARK 200   COMPLETENESS FOR RANGE      (%) : 99.8
REMARK 200   DATA REDUNDANCY                 : 11.080
REMARK 200   R MERGE                     (I) : 0.07600
REMARK 200   R SYM                       (I) : NULL
REMARK 200   <I/SIGMA(I)> FOR THE DATA SET   : 12.5000
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200   HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 2.00
REMARK 200   HIGHEST RESOLUTION SHELL, RANGE LOW  (A) : 2.07
REMARK 200   COMPLETENESS FOR SHELL      (%) : 100.0
REMARK 200   DATA REDUNDANCY IN SHELL        : 10.00
REMARK 200   R MERGE FOR SHELL           (I) : 0.37000
REMARK 200   R SYM FOR SHELL             (I) : NULL
REMARK 200   <I/SIGMA(I)> FOR SHELL          : NULL
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: NULL
REMARK 200 SOFTWARE USED: CNS
REMARK 200 STARTING MODEL: NULL
REMARK 200
REMARK 200 REMARK: NULL
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS    (%): NULL
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: SODIUM CITRATE, HEPES
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 65 2 2
REMARK 290
REMARK 290       SYMOP   SYMMETRY
REMARK 290       NNNMMM  OPERATOR
REMARK 290       1555    X,Y,Z
REMARK 290       2555    -Y,X-Y,2/3+Z
REMARK 290       3555    -X+Y,-X,1/3+Z
REMARK 290       4555    -X,-Y,1/2+Z
REMARK 290       5555    Y,-X+Y,1/6+Z
REMARK 290       6555    X-Y,X,5/6+Z
REMARK 290       7555    Y,X,2/3-Z
REMARK 290       8555    X-Y,-Y,-Z
REMARK 290       9555    -X,-X+Y,1/3-Z
REMARK 290       10555   -Y,-X,1/6-Z
REMARK 290       11555   -X+Y,Y,1/2-Z
REMARK 290       12555   X,X-Y,5/6-Z
REMARK 290
REMARK 290      WHERE NNN -> OPERATOR NUMBER
REMARK 290            MMM -> TRANSLATION VECTOR
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290     SMTRY1   1  1.000000  0.000000  0.000000        0.00000
REMARK 290     SMTRY2   1  0.000000  1.000000  0.000000        0.00000
REMARK 290     SMTRY3   1  0.000000  0.000000  1.000000        0.00000
REMARK 290     SMTRY1   2 -0.500000 -0.866025  0.000000        0.00000
REMARK 290     SMTRY2   2  0.866025 -0.500000  0.000000        0.00000
REMARK 290     SMTRY3   2  0.000000  0.000000  1.000000      192.27000
REMARK 290     SMTRY1   3 -0.500000  0.866025  0.000000        0.00000
REMARK 290     SMTRY2   3 -0.866025 -0.500000  0.000000        0.00000
REMARK 290     SMTRY3   3  0.000000  0.000000  1.000000       96.13500
REMARK 290     SMTRY1   4 -1.000000  0.000000  0.000000        0.00000
REMARK 290     SMTRY2   4  0.000000 -1.000000  0.000000        0.00000
REMARK 290     SMTRY3   4  0.000000  0.000000  1.000000      144.20250
REMARK 290     SMTRY1   5  0.500000  0.866025  0.000000        0.00000
REMARK 290     SMTRY2   5 -0.866025  0.500000  0.000000        0.00000
REMARK 290     SMTRY3   5  0.000000  0.000000  1.000000       48.06750
REMARK 290     SMTRY1   6  0.500000 -0.866025  0.000000        0.00000
REMARK 290     SMTRY2   6  0.866025  0.500000  0.000000        0.00000
REMARK 290     SMTRY3   6  0.000000  0.000000  1.000000      240.33750
REMARK 290     SMTRY1   7 -0.500000  0.866025  0.000000        0.00000
REMARK 290     SMTRY2   7  0.866025  0.500000  0.000000        0.00000
REMARK 290     SMTRY3   7  0.000000  0.000000 -1.000000      192.27000
REMARK 290     SMTRY1   8  1.000000  0.000000  0.000000        0.00000
REMARK 290     SMTRY2   8  0.000000 -1.000000  0.000000        0.00000
REMARK 290     SMTRY3   8  0.000000  0.000000 -1.000000        0.00000
```

```
REMARK 290    SMTRY1   9 -0.500000 -0.866025  0.000000       .  0.00000
REMARK 290    SMTRY2   9 -0.866025  0.500000  0.000000          0.00000
REMARK 290    SMTRY3   9  0.000000  0.000000 -1.000000         96.13500
REMARK 290    SMTRY1  10  0.500000 -0.866025  0.000000          0.00000
REMARK 290    SMTRY2  10 -0.866025 -0.500000  0.000000          0.00000
REMARK 290    SMTRY3  10  0.000000  0.000000 -1.000000         48.06750
REMARK 290    SMTRY1  11 -1.000000  0.000000  0.000000          0.00000
REMARK 290    SMTRY2  11  0.000000  1.000000  0.000000          0.00000
REMARK 290    SMTRY3  11  0.000000  0.000000 -1.000000        144.20250
REMARK 290    SMTRY1  12  0.500000  0.866025  0.000000          0.00000
REMARK 290    SMTRY2  12  0.866025 -0.500000  0.000000          0.00000
REMARK 290    SMTRY3  12  0.000000  0.000000 -1.000000        240.33750
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1
REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
REMARK 300 WHICH CONSISTS OF 2 CHAIN(S). SEE REMARK 350 FOR
REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
REMARK 350
REMARK 350 GENERATING THE BIOMOLECULE
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW.  BOTH NON-CRYSTALLOGRAPHIC AND
REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
REMARK 350
REMARK 350 BIOMOLECULE: 1
REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B
REMARK 350    BIOMT1   1  1.000000  0.000000  0.000000          0.00000
REMARK 350    BIOMT2   1  0.000000  1.000000  0.000000          0.00000
REMARK 350    BIOMT3   1  0.000000  0.000000  1.000000          0.00000
REMARK 350    BIOMT1   2  0.500000 -0.866025  0.000000         65.12250
REMARK 350    BIOMT2   2 -0.866025 -0.500000  0.000000        112.79548
REMARK 350    BIOMT3   2  0.000000  0.000000 -1.000000         48.06750
REMARK 375
REMARK 375 SPECIAL POSITION
REMARK 375 THE FOLLOWING ATOMS ARE FOUND TO BE WITHIN 0.15 ANGSTROMS
REMARK 375 OF A SYMMETRY RELATED ATOM AND ARE ASSUMED TO BE ON SPECIAL
REMARK 375 POSITIONS.
REMARK 375
REMARK 375 ATOM RES CSSEQI
REMARK 375      HOH   977    LIES ON A SPECIAL POSITION.
REMARK 375      HOH  1049    LIES ON A SPECIAL POSITION.
REMARK 375      HOH   978    LIES ON A SPECIAL POSITION.
REMARK 375      HOH  1077    LIES ON A SPECIAL POSITION.
REMARK 375      HOH  1013    LIES ON A SPECIAL POSITION.
REMARK 375      HOH   976    LIES ON A SPECIAL POSITION.
REMARK 375      HOH   979    LIES ON A SPECIAL POSITION.
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
REMARK 465
REMARK 465   M RES C SSSEQI
REMARK 465     MET A     0
REMARK 465     THR A   419
REMARK 465     GLY A   420
REMARK 465     SER A   421
REMARK 465     THR A   422
REMARK 465     GLU A   423
REMARK 465     GLU A   424
REMARK 465     GLY A   425
REMARK 465     GLN A   426
REMARK 465     PHE A   427
REMARK 465     HIS A   428
REMARK 465     MET B     0
REMARK 465     THR B   419
REMARK 465     GLY B   420
REMARK 465     SER B   421
REMARK 465     THR B   422
REMARK 465     GLU B   423
REMARK 465     GLU B   424
REMARK 465     GLY B   425
REMARK 465     GLN B   426
REMARK 465     PHE B   427
REMARK 465     HIS B   428
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
```

```
REMARK 500 SUBTOPIC: CLOSE CONTACTS IN SAME ASYMMETRIC UNIT
REMARK 500
REMARK 500 THE FOLLOWING ATOMS ARE IN CLOSE CONTACT.
REMARK 500
REMARK 500 ATM1  RES C  SSEQI    ATM2 RES C  SSEQI
REMARK 500  O    ALA A   276      O   HOH     533                 2.16
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: CLOSE CONTACTS
REMARK 500
REMARK 500 THE FOLLOWING ATOMS THAT ARE RELATED BY CRYSTALLOGRAPHIC
REMARK 500 SYMMETRY ARE IN CLOSE CONTACT.  AN ATOM LOCATED WITHIN 0.15
REMARK 500 ANGSTROMS OF A SYMMETRY RELATED ATOM IS ASSUMED TO BE ON A
REMARK 500 SPECIAL POSITION AND IS, THEREFORE, LISTED IN REMARK 375
REMARK 500 INSTEAD OF REMARK 500.  ATOMS WITH NON-BLANK ALTERNATE
REMARK 500 LOCATION INDICATORS ARE NOT INCLUDED IN THE CALCULATIONS.
REMARK 500
REMARK 500 DISTANCE CUTOFF:
REMARK 500 2.2 ANGSTROMS FOR CONTACTS NOT INVOLVING HYDROGEN ATOMS
REMARK 500 1.6 ANGSTROMS FOR CONTACTS INVOLVING HYDROGEN ATOMS
REMARK 500
REMARK 500 ATM1  RES C  SSEQI    ATM2 RES C  SSEQI  SSYMOP   DISTANCE
REMARK 500  O    HOH    1157      O   HOH    1157   10665    1.50
REMARK 500  O    HOH    1159      O   HOH    1159   10665    1.85
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500  M RES CSSEQI ATM1   RES CSSEQI ATM2   DEVIATION
REMARK 500    VAL A 164   CG2   VAL A 164   CB    -0.101
REMARK 500    PRO A 267   CG    PRO A 267   CB     0.095
REMARK 500    ASN B 313   CG    ASN B 313   CB     0.098
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500  M RES CSSEQI ATM1    ATM2    ATM3
REMARK 500    THR A  19   N   -  CA  -  C    ANGL. DEV. = 10.3 DEGREES
REMARK 500    ARG A  50   CG  -  CD  -  NE   ANGL. DEV. =-12.0 DEGREES
REMARK 500    PRO A 107   N   -  CA  -  C    ANGL. DEV. = -9.9 DEGREES
REMARK 500    LYS A 392   N   -  CA  -  C    ANGL. DEV. =-11.2 DEGREES
REMARK 500    THR B  19   N   -  CA  -  C    ANGL. DEV. =  9.7 DEGREES
REMARK 500    PRO B 107   N   -  CA  -  C    ANGL. DEV. =-10.3 DEGREES
REMARK 500    GLY B 192   N   -  CA  -  C    ANGL. DEV. =  9.4 DEGREES
REMARK 525
REMARK 525 SOLVENT
REMARK 525 THE FOLLOWING SOLVENT MOLECULES LIE FARTHER THAN EXPECTED
REMARK 525 FROM THE PROTEIN OR NUCLEIC ACID MOLECULE AND MAY BE
REMARK 525 ASSOCIATED WITH A SYMMETRY RELATED MOLECULE (M=MODEL
REMARK 525 NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE
REMARK 525 NUMBER; I=INSERTION CODE):
REMARK 525
REMARK 525  M RES CSSEQI
REMARK 525  0 HOH   909        DISTANCE =  5.09 ANGSTROMS
REMARK 525  0 HOH   940        DISTANCE =  6.13 ANGSTROMS
REMARK 525  0 HOH   953        DISTANCE =  6.75 ANGSTROMS
REMARK 999
REMARK 999 SEQUENCE
REMARK 999 AN ALANINE WAS INSERTED AT THE N-TERMINUS
REMARK 999 AFTER THE FIRST METHIONINE RESIDUE, MASVV...
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REMARK 999 MET 0 WAS NOT OBSERVED DUE TO POOR DENSITY OR
REMARK 999 PERHAPS IT WAS CLEAVED OFF THE RECOMBINANT
REMARK 999 PROTEIN DURING EXPRESSION. THEREFORE, THE
REMARK 999 FIRST RESIDUE IN THIS ENTRY IS ALA 1.
DBREF  1F61 A    0   428  GB      2909543  CAA17422          1     428
DBREF  1F61 B    0   428  GB      2909543  CAA17422          1     428
SEQADV 1F61 ALA A    1  GB   2909543              INSERTION
SEQADV 1F61 ALA B    1  GB   2909543              INSERTION
SEQRES   1 A  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES   2 A  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES   3 A  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES   4 A  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES   5 A  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES   6 A  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES   7 A  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES   8 A  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES   9 A  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES  10 A  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES  11 A  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES  12 A  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES  13 A  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES  14 A  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES  15 A  429  GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES  16 A  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 A  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 A  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 A  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 A  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 A  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 A  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 A  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 A  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 A  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 A  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 A  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 A  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 A  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 A  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 A  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 A  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 A  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES   1 B  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES   2 B  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES   3 B  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES   4 B  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES   5 B  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES   6 B  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES   7 B  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES   8 B  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES   9 B  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES  10 B  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES  11 B  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES  12 B  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES  13 B  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES  14 B  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES  15 B  429  GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES  16 B  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 B  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 B  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 B  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 B  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 B  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 B  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 B  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 B  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 B  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 B  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 B  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 B  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 B  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 B  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 B  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 B  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 B  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
HET     MG  A 451          1
HET     MG  B 452          1
HETNAM      MG MAGNESIUM ION
FORMUL   3   MG    2(MG1 2+)
FORMUL   5   HOH   *692(H2 O1)
HELIX    1   1 SER A    9  ASN A   20  1                                12
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HELIX    2   2 PRO A   21  LYS A   24  5                                                    4
HELIX    3   3 SER A   31  LEU A   38  1                                                    8
HELIX    4   4 HIS A   46  LEU A   63  1                                                   18
HELIX    5   5 THR A   73  ALA A   83  1                                                   11
HELIX    6   6 SER A   91  ALA A   99  1                                                    9
HELIX    7   7 ASN A  115  GLY A  139  1                                                   25
HELIX    8   8 GLY A  160  GLY A  175  1                                                   16
HELIX    9   9 LEU A  185  LYS A  189  5                                                    5
HELIX   10  10 PRO A  201  ALA A  219  1                                                   19
HELIX   11  11 ASP A  245  PRO A  247  5                                                    3
HELIX   12  12 GLY A  264  ALA A  276  1                                                   13
HELIX   13  13 PRO A  277  ALA A  279  5                                                    3
HELIX   14  14 ASP A  290  ALA A  303  1                                                   14
HELIX   15  15 ASN A  319  LEU A  324  1                                                    6
HELIX   16  16 ASP A  325  MET A  339  1                                                   15
HELIX   17  17 LEU A  348  GLN A  369  1                                                   22
HELIX   18  18 GLN A  369  GLU A  384  1                                                   16
HELIX   19  19 GLU A  385  GLY A  387  5                                                    3
HELIX   20  20 LYS A  392  VAL A  397  1                                                    6
HELIX   21  21 GLY A  398  ASP A  410  1                                                   13
HELIX   22  22 SER B    9  ASN B   20  1                                                   12
HELIX   23  23 PRO B   21  LYS B   24  5                                                    4
HELIX   24  24 SER B   31  GLN B   39  1                                                    9
HELIX   25  25 HIS B   46  LEU B   63  1                                                   18
HELIX   26  26 THR B   73  ALA B   83  1                                                   11
HELIX   27  27 SER B   91  ALA B   99  1                                                    9
HELIX   28  28 ASN B  115  GLY B  139  1                                                   25
HELIX   29  29 GLY B  160  GLY B  175  1                                                   16
HELIX   30  30 LEU B  185  LYS B  189  5                                                    5
HELIX   31  31 PRO B  201  ALA B  219  1                                                   19
HELIX   32  32 ASP B  245  PRO B  247  5                                                    3
HELIX   33  33 GLY B  264  ALA B  276  1                                                   13
HELIX   34  34 PRO B  277  ALA B  279  5                                                    3
HELIX   35  35 ASP B  290  TYR B  305  1                                                   16
HELIX   36  36 ASN B  319  LEU B  324  1                                                    6
HELIX   37  37 ASP B  325  MET B  339  1                                                   15
HELIX   38  38 LEU B  348  GLN B  369  1                                                   22
HELIX   39  39 GLN B  369  GLU B  384  1                                                   16
HELIX   40  40 GLU B  385  GLY B  387  5                                                    3
HELIX   41  41 LYS B  392  VAL B  397  1                                                    6
HELIX   42  42 GLY B  398  ASP B  410  1                                                   13
SHEET    1   A 8 VAL A  66  LEU A  69  0
SHEET    2   A 8 PHE A 341  ILE A 346  1  O  LYS A 342    N  VAL A  66
SHEET    3   A 8 MET A 309  ASN A 313  1  O  LEU A 310    N  PHE A 343
SHEET    4   A 8 LEU A 281  MET A 284  1  O  ILE A 282    N  ALA A 311
SHEET    5   A 8 VAL A 224  THR A 229  1  O  VAL A 225    N  LEU A 281
SHEET    6   A 8 GLY A 178  GLU A 182  1  O  SER A 179    N  ILE A 226
SHEET    7   A 8 ILE A 150  ASP A 153  1  O  ILE A 150    N  GLY A 178
SHEET    8   A 8 ILE A  88  LEU A  90  1  O  ILE A  88    N  VAL A 151
SHEET    1   B 4 VAL A 198  LEU A 199  0
SHEET    2   B 4 LEU A 236  ILE A 237  1  O  LEU A 236    N  LEU A 199
SHEET    3   B 4 TYR A 259  THR A 261 -1  N  TYR A 259    O  ILE A 237
SHEET    4   B 4 ILE A 249  ARG A 253 -1  N  THR A 250    O  ARG A 260
SHEET    1   C 8 VAL B  66  LEU B  69  0
SHEET    2   C 8 PHE B 341  ILE B 346  1  O  LYS B 342    N  VAL B  66
SHEET    3   C 8 MET B 309  ASN B 313  1  O  LEU B 310    N  PHE B 343
SHEET    4   C 8 LEU B 281  MET B 284  1  O  ILE B 282    N  ALA B 311
SHEET    5   C 8 VAL B 224  THR B 229  1  O  VAL B 225    N  LEU B 281
SHEET    6   C 8 GLY B 178  GLU B 182  1  O  SER B 179    N  ILE B 226
SHEET    7   C 8 ILE B 150  ASP B 153  1  O  ILE B 150    N  GLY B 178
SHEET    8   C 8 ILE B  88  LEU B  90  1  O  ILE B  88    N  VAL B 151
SHEET    1   D 4 VAL B 198  LEU B 199  0
SHEET    2   D 4 LEU B 236  ILE B 237  1  O  LEU B 236    N  LEU B 199
SHEET    3   D 4 TYR B 259  THR B 261 -1  N  TYR B 259    O  ILE B 237
SHEET    4   D 4 ILE B 249  ARG B 253 -1  N  THR B 250    O  ARG B 260
CRYST1  130.245  130.245  288.405  90.00   90.00 120.00 P 65 2 2      24
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      0.007678  0.004433  0.000000        0.00000
SCALE2      0.000000  0.008866  0.000000        0.00000
SCALE3      0.000000  0.000000  0.003467        0.00000
ATOM     1  N   ALA A   1      59.802  60.708  55.791  1.00 54.70           N
ATOM     2  CA  ALA A   1      60.435  59.652  54.948  1.00 54.18           C
ATOM     3  C   ALA A   1      61.171  60.345  53.812  1.00 53.18           C
ATOM     4  O   ALA A   1      62.052  61.197  54.017  1.00 53.92           O
ATOM     5  CB  ALA A   1      59.340  58.684  54.368  1.00 54.67           C
ATOM     6  N   SER A   2      60.780  59.985  52.602  1.00 51.56           N
ATOM     7  CA  SER A   2      61.371  60.565  51.413  1.00 48.95           C
ATOM     8  C   SER A   2      60.627  61.845  51.061  1.00 47.61           C
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| ATOM | 9 | O | SER A | 2 | 59.407 | 61.964 | 51.302 | 1.00 47.31 | O |
|------|-----|-----|-------|-----|--------|--------|--------|-----------|---|
| ATOM | 10 | CB | SER A | 2 | 61.248 | 59.580 | 50.245 | 1.00 48.41 | C |
| ATOM | 11 | OG | SER A | 2 | 61.576 | 60.216 | 49.025 | 1.00 47.50 | O |
| ATOM | 12 | N | VAL A | 3 | 61.354 | 62.800 | 50.496 | 1.00 45.35 | N |
| ATOM | 13 | CA | VAL A | 3 | 60.722 | 64.023 | 50.062 | 1.00 43.73 | C |
| ATOM | 14 | C | VAL A | 3 | 60.683 | 63.998 | 48.514 | 1.00 42.22 | C |
| ATOM | 15 | O | VAL A | 3 | 60.299 | 64.982 | 47.869 | 1.00 41.88 | O |
| ATOM | 16 | CB | VAL A | 3 | 61.498 | 65.262 | 50.577 | 1.00 44.27 | C |
| ATOM | 17 | CG1 | VAL A | 3 | 61.538 | 65.225 | 52.122 | 1.00 44.42 | C |
| ATOM | 18 | CG2 | VAL A | 3 | 62.916 | 65.292 | 49.988 | 1.00 44.14 | C |
| ATOM | 19 | N | VAL A | 4 | 61.087 | 62.872 | 47.923 | 1.00 39.84 | N |
| ATOM | 20 | CA | VAL A | 4 | 61.077 | 62.750 | 46.460 | 1.00 37.88 | C |
| ATOM | 21 | C | VAL A | 4 | 59.629 | 62.823 | 45.966 | 1.00 36.96 | C |
| ATOM | 22 | O | VAL A | 4 | 58.777 | 62.065 | 46.426 | 1.00 36.92 | O |
| ATOM | 23 | CB | VAL A | 4 | 61.733 | 61.430 | 46.016 | 1.00 37.01 | C |
| ATOM | 24 | CG1 | VAL A | 4 | 61.549 | 61.220 | 44.503 | 1.00 36.50 | C |
| ATOM | 25 | CG2 | VAL A | 4 | 63.219 | 61.464 | 46.379 | 1.00 36.57 | C |
| ATOM | 26 | N | GLY A | 5 | 59.347 | 63.772 | 45.079 | 1.00 36.04 | N |
| ATOM | 27 | CA | GLY A | 5 | 57.996 | 63.935 | 44.558 | 1.00 35.45 | C |
| ATOM | 28 | C | GLY A | 5 | 56.909 | 64.488 | 45.479 | 1.00 35.15 | C |
| ATOM | 29 | O | GLY A | 5 | 55.711 | 64.411 | 45.151 | 1.00 34.39 | O |
| ATOM | 30 | N | THR A | 6 | 57.289 | 65.048 | 46.628 | 1.00 34.93 | N |
| ATOM | 31 | CA | THR A | 6 | 56.295 | 65.629 | 47.550 | 1.00 34.76 | C |
| ATOM | 32 | C | THR A | 6 | 55.502 | 66.688 | 46.794 | 1.00 33.68 | C |
| ATOM | 33 | O | THR A | 6 | 56.092 | 67.505 | 46.117 | 1.00 33.16 | O |
| ATOM | 34 | CB | THR A | 6 | 56.978 | 66.357 | 48.747 | 1.00 35.83 | C |
| ATOM | 35 | OG1 | THR A | 6 | 57.738 | 65.412 | 49.506 | 1.00 37.86 | O |
| ATOM | 36 | CG2 | THR A | 6 | 55.936 | 66.986 | 49.655 | 1.00 36.43 | C |
| ATOM | 37 | N | PRO A | 7 | 54.162 | 66.693 | 46.916 | 1.00 33.04 | N |
| ATOM | 38 | CA | PRO A | 7 | 53.307 | 67.668 | 46.229 | 1.00 33.44 | C |
| ATOM | 39 | C | PRO A | 7 | 53.533 | 69.096 | 46.741 | 1.00 34.23 | C |
| ATOM | 40 | O | PRO A | 7 | 53.964 | 69.288 | 47.879 | 1.00 33.96 | O |
| ATOM | 41 | CB | PRO A | 7 | 51.882 | 67.211 | 46.571 | 1.00 32.39 | C |
| ATOM | 42 | CG | PRO A | 7 | 52.048 | 65.736 | 46.944 | 1.00 33.46 | C |
| ATOM | 43 | CD | PRO A | 7 | 53.357 | 65.762 | 47.716 | 1.00 33.39 | C |
| ATOM | 44 | N | LYS A | 8 | 53.253 | 70.090 | 45.906 | 1.00 34.53 | N |
| ATOM | 45 | CA | LYS A | 8 | 53.362 | 71.474 | 46.360 | 1.00 35.18 | C |
| ATOM | 46 | C | LYS A | 8 | 52.108 | 71.709 | 47.208 | 1.00 35.04 | C |
| ATOM | 47 | O | LYS A | 8 | 51.157 | 70.920 | 47.143 | 1.00 35.01 | O |
| ATOM | 48 | CB | LYS A | 8 | 53.363 | 72.433 | 45.174 | 1.00 35.69 | C |
| ATOM | 49 | CG | LYS A | 8 | 54.645 | 72.409 | 44.398 | 1.00 37.09 | C |
| ATOM | 50 | CD | LYS A | 8 | 54.638 | 73.422 | 43.271 | 1.00 37.98 | C |
| ATOM | 51 | CE | LYS A | 8 | 53.886 | 72.918 | 42.053 | 1.00 38.00 | C |
| ATOM | 52 | NZ | LYS A | 8 | 54.649 | 73.233 | 40.781 | 1.00 37.44 | N |
| ATOM | 53 | N | SER A | 9 | 52.092 | 72.769 | 48.021 | 1.00 34.54 | N |
| ATOM | 54 | CA | SER A | 9 | 50.903 | 73.067 | 48.835 | 1.00 33.73 | C |
| ATOM | 55 | C | SER A | 9 | 49.902 | 73.795 | 47.935 | 1.00 33.55 | C |
| ATOM | 56 | O | SER A | 9 | 50.259 | 74.302 | 46.878 | 1.00 33.24 | O |
| ATOM | 57 | CB | SER A | 9 | 51.268 | 74.008 | 49.981 | 1.00 33.81 | C |
| ATOM | 58 | OG | SER A | 9 | 51.656 | 75.265 | 49.424 | 1.00 33.83 | O |
| ATOM | 59 | N | ALA A | 10 | 48.658 | 73.879 | 48.367 | 1.00 34.11 | N |
| ATOM | 60 | CA | ALA A | 10 | 47.671 | 74.584 | 47.575 | 1.00 35.13 | C |
| ATOM | 61 | C | ALA A | 10 | 48.080 | 76.054 | 47.450 | 1.00 35.98 | C |
| ATOM | 62 | O | ALA A | 10 | 47.849 | 76.691 | 46.428 | 1.00 35.22 | O |
| ATOM | 63 | CB | ALA A | 10 | 46.286 | 74.470 | 48.229 | 1.00 34.34 | C |
| ATOM | 64 | N | GLU A | 11 | 48.693 | 76.595 | 48.497 | 1.00 36.95 | N |
| ATOM | 65 | CA | GLU A | 11 | 49.113 | 78.005 | 48.448 | 1.00 38.71 | C |
| ATOM | 66 | C | GLU A | 11 | 50.173 | 78.234 | 47.371 | 1.00 37.64 | C |
| ATOM | 67 | O | GLU A | 11 | 50.140 | 79.239 | 46.676 | 1.00 37.24 | O |
| ATOM | 68 | CB | GLU A | 11 | 49.629 | 78.478 | 49.824 | 1.00 40.23 | C |
| ATOM | 69 | CG | GLU A | 11 | 48.607 | 78.298 | 50.953 | 1.00 43.88 | C |
| ATOM | 70 | CD | GLU A | 11 | 48.410 | 76.829 | 51.408 | 1.00 46.67 | C |
| ATOM | 71 | OE1 | GLU A | 11 | 49.076 | 75.900 | 50.880 | 1.00 47.80 | O |
| ATOM | 72 | OE2 | GLU A | 11 | 47.577 | 76.596 | 52.319 | 1.00 48.67 | O |
| ATOM | 73 | N | GLN A | 12 | 51.109 | 77.310 | 47.213 | 1.00 37.76 | N |
| ATOM | 74 | CA | GLN A | 12 | 52.107 | 77.479 | 46.163 | 1.00 38.42 | C |
| ATOM | 75 | C | GLN A | 12 | 51.470 | 77.435 | 44.756 | 1.00 37.98 | C |
| ATOM | 76 | O | GLN A | 12 | 51.818 | 78.218 | 43.850 | 1.00 38.04 | O |
| ATOM | 77 | CB | GLN A | 12 | 53.142 | 76.384 | 46.241 | 1.00 39.84 | C |
| ATOM | 78 | CG | GLN A | 12 | 53.724 | 76.195 | 47.613 | 1.00 43.38 | C |
| ATOM | 79 | CD | GLN A | 12 | 54.759 | 75.099 | 47.602 | 1.00 44.69 | C |
| ATOM | 80 | OE1 | GLN A | 12 | 55.833 | 75.258 | 47.019 | 1.00 47.37 | O |
| ATOM | 81 | NE2 | GLN A | 12 | 54.439 | 73.974 | 48.213 | 1.00 44.87 | N |
| ATOM | 82 | N | ILE A | 13 | 50.544 | 76.508 | 44.569 | 1.00 36.98 | N |
| ATOM | 83 | CA | ILE A | 13 | 49.874 | 76.372 | 43.282 | 1.00 36.28 | C |
| ATOM | 84 | C | ILE A | 13 | 49.113 | 77.668 | 42.999 | 1.00 36.20 | C |
| ATOM | 85 | O | ILE A | 13 | 49.210 | 78.240 | 41.915 | 1.00 35.60 | O |
| ATOM | 86 | CB | ILE A | 13 | 48.881 | 75.163 | 43.309 | 1.00 35.86 | C |
| ATOM | 87 | CG1 | ILE A | 13 | 49.672 | 73.845 | 43.382 | 1.00 35.79 | C |
| ATOM | 88 | CG2 | ILE A | 13 | 47.946 | 75.201 | 42.095 | 1.00 34.08 | C |

| ATOM | 89 | CD1 | ILE | A | 13 | 48.775 | 72.644 | 43.617 | 1.00 | 35.52 | C |
|------|-----|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 90 | N | GLN | A | 14 | 48.366 | 78.138 | 43.989 | 1.00 | 37.00 | N |
| ATOM | 91 | CA | GLN | A | 14 | 47.585 | 79.367 | 43.815 | 1.00 | 37.67 | C |
| ATOM | 92 | C | GLN | A | 14 | 48.483 | 80.550 | 43.439 | 1.00 | 38.02 | C |
| ATOM | 93 | O | GLN | A | 14 | 48.115 | 81.388 | 42.610 | 1.00 | 37.32 | O |
| ATOM | 94 | CB | GLN | A | 14 | 46.816 | 79.682 | 45.100 | 1.00 | 38.03 | C |
| ATOM | 95 | CG | GLN | A | 14 | 45.838 | 80.839 | 44.960 | 1.00 | 37.87 | C |
| ATOM | 96 | CD | GLN | A | 14 | 44.723 | 80.536 | 43.986 | 1.00 | 38.21 | C |
| ATOM | 97 | OE1 | GLN | A | 14 | 43.890 | 79.680 | 44.236 | 1.00 | 38.34 | O |
| ATOM | 98 | NE2 | GLN | A | 14 | 44.709 | 81.239 | 42.863 | 1.00 | 38.74 | N |
| ATOM | 99 | N | GLN | A | 15 | 49.662 | 80.606 | 44.057 | 1.00 | 39.11 | N |
| ATOM | 100 | CA | GLN | A | 15 | 50.617 | 81.683 | 43.801 | 1.00 | 40.25 | C |
| ATOM | 101 | C | GLN | A | 15 | 51.069 | 81.637 | 42.347 | 1.00 | 39.81 | C |
| ATOM | 102 | O | GLN | A | 15 | 51.179 | 82.675 | 41.697 | 1.00 | 39.48 | O |
| ATOM | 103 | CB | GLN | A | 15 | 51.820 | 81.564 | 44.759 | 1.00 | 42.49 | C |
| ATOM | 104 | CG | GLN | A | 15 | 52.980 | 82.531 | 44.487 | 1.00 | 45.17 | C |
| ATOM | 105 | CD | GLN | A | 15 | 52.634 | 84.003 | 44.727 | 1.00 | 47.62 | C |
| ATOM | 106 | OE1 | GLN | A | 15 | 51.536 | 84.345 | 45.208 | 1.00 | 48.97 | O |
| ATOM | 107 | NE2 | GLN | A | 15 | 53.583 | 84.889 | 44.400 | 1.00 | 48.55 | N |
| ATOM | 108 | N | GLU | A | 16 | 51.330 | 80.438 | 41.828 | 1.00 | 39.51 | N |
| ATOM | 109 | CA | GLU | A | 16 | 51.730 | 80.314 | 40.425 | 1.00 | 39.28 | C |
| ATOM | 110 | C | GLU | A | 16 | 50.577 | 80.741 | 39.540 | 1.00 | 37.54 | C |
| ATOM | 111 | O | GLU | A | 16 | 50.775 | 81.442 | 38.552 | 1.00 | 37.09 | O |
| ATOM | 112 | CB | GLU | A | 16 | 52.099 | 78.869 | 40.083 | 1.00 | 41.55 | C |
| ATOM | 113 | CG | GLU | A | 16 | 53.384 | 78.410 | 40.697 | 1.00 | 45.67 | C |
| ATOM | 114 | CD | GLU | A | 16 | 53.686 | 76.963 | 40.339 | 1.00 | 48.60 | C |
| ATOM | 115 | OE1 | GLU | A | 16 | 53.576 | 76.633 | 39.130 | 1.00 | 50.02 | O |
| ATOM | 116 | OE2 | GLU | A | 16 | 54.028 | 76.162 | 41.252 | 1.00 | 50.17 | O |
| ATOM | 117 | N | TRP | A | 17 | 49.365 | 80.313 | 39.887 | 1.00 | 36.43 | N |
| ATOM | 118 | CA | TRP | A | 17 | 48.206 | 80.680 | 39.073 | 1.00 | 36.16 | C |
| ATOM | 119 | C | TRP | A | 17 | 48.020 | 82.196 | 39.100 | 1.00 | 37.08 | C |
| ATOM | 120 | O | TRP | A | 17 | 47.628 | 82.798 | 38.091 | 1.00 | 37.15 | O |
| ATOM | 121 | CB | TRP | A | 17 | 46.922 | 80.012 | 39.581 | 1.00 | 34.23 | C |
| ATOM | 122 | CG | TRP | A | 17 | 46.862 | 78.501 | 39.363 | 1.00 | 33.82 | C |
| ATOM | 123 | CD1 | TRP | A | 17 | 47.796 | 77.718 | 38.727 | 1.00 | 32.72 | C |
| ATOM | 124 | CD2 | TRP | A | 17 | 45.843 | 77.602 | 39.837 | 1.00 | 32.67 | C |
| ATOM | 125 | NE1 | TRP | A | 17 | 47.425 | 76.396 | 38.791 | 1.00 | 32.65 | N |
| ATOM | 126 | CE2 | TRP | A | 17 | 46.232 | 76.294 | 39.462 | 1.00 | 32.89 | C |
| ATOM | 127 | CE3 | TRP | A | 17 | 44.649 | 77.776 | 40.546 | 1.00 | 32.38 | C |
| ATOM | 128 | CZ2 | TRP | A | 17 | 45.464 | 75.160 | 39.774 | 1.00 | 31.98 | C |
| ATOM | 129 | CZ3 | TRP | A | 17 | 43.883 | 76.654 | 40.862 | 1.00 | 32.51 | C |
| ATOM | 130 | CH2 | TRP | A | 17. | 44.298 | 75.357 | 40.472 | 1.00 | 32.66 | C |
| ATOM | 131 | N | ASP | A | 18 | 48.297 | 82.805 | 40.253 | 1.00 | 37.64 | N |
| ATOM | 132 | CA | ASP | A | 18 | 48.119 | 84.255 | 40.389 | 1.00 | 38.81 | C |
| ATOM | 133 | C | ASP | A | 18 | 49.182 | 85.063 | 39.699 | 1.00 | 38.60 | C |
| ATOM | 134 | O | ASP | A | 18 | 48.894 | 86.116 | 39.151 | 1.00 | 39.29 | O |
| ATOM | 135 | CB | ASP | A | 18 | 48.131 | 84.690 | 41.862 | 1.00 | 39.78 | C |
| ATOM | 136 | CG | ASP | A | 18 | 46.967 | 84.159 | 42.639 | 1.00 | 40.72 | C |
| ATOM | 137 | OD1 | ASP | A | 18 | 45.926 | 83.837 | 42.023 | 1.00 | 41.31 | O |
| ATOM | 138 | OD2 | ASP | A | 18 | 47.088 | 84.072 | 43.881 | 1.00 | 41.97 | O |
| ATOM | 139 | N | THR | A | 19 | 50.407 | 84.566 | 39.705 | 1.00 | 38.21 | N |
| ATOM | 140 | CA | THR | A | 19 | 51.504 | 85.338 | 39.167 | 1.00 | 38.57 | C |
| ATOM | 141 | C | THR | A | 19 | 52.181 | 84.954 | 37.860 | 1.00 | 38.18 | C |
| ATOM | 142 | O | THR | A | 19 | 52.732 | 85.826 | 37.182 | 1.00 | 37.96 | O |
| ATOM | 143 | CB | THR | A | 19 | 52.578 | 85.499 | 40.264 | 1.00 | 39.06 | C |
| ATOM | 144 | OG1 | THR | A | 19 | 53.135 | 84.214 | 40.593 | 1.00 | 40.61 | O |
| ATOM | 145 | CG2 | THR | A | 19 | 51.929 | 86.070 | 41.527 | 1.00 | 38.62 | C |
| ATOM | 146 | N | ASN | A | 20 | 52.160 | 83.678 | 37.484 | 1.00 | 36.60 | N |
| ATOM | 147 | CA | ASN | A | 20 | 52.816 | 83.313 | 36.240 | 1.00 | 36.01 | C |
| ATOM | 148 | C | ASN | A | 20 | 51.999 | 83.817 | 35.062 | 1.00 | 34.92 | C |
| ATOM | 149 | O | ASN | A | 20 | 50.791 | 83.557 | 34.978 | 1.00 | 34.78 | O |
| ATOM | 150 | CB | ASN | A | 20 | 52.946 | 81.802 | 36.148 | 1.00 | 36.86 | C |
| ATOM | 151 | CG | ASN | A | 20 | 53.830 | 81.370 | 35.026 | 1.00 | 36.65 | C |
| ATOM | 152 | OD1 | ASN | A | 20 | 53.858 | 81.977 | 33.958 | 1.00 | 37.10 | O |
| ATOM | 153 | ND2 | ASN | A | 20 | 54.545 | 80.281 | 35.244 | 1.00 | 38.79 | N |
| ATOM | 154 | N | PRO | A | 21 | 52.633 | 84.575 | 34.145 | 1.00 | 34.02 | N |
| ATOM | 155 | CA | PRO | A | 21 | 51.900 | 85.085 | 32.978 | 1.00 | 33.59 | C |
| ATOM | 156 | C | PRO | A | 21 | 51.301 | 83.947 | 32.115 | 1.00 | 32.32 | C |
| ATOM | 157 | O | PRO | A | 21 | 50.394 | 84.171 | 31.305 | 1.00 | 30.74 | O |
| ATOM | 158 | CB | PRO | A | 21 | 52.948 | 85.904 | 32.228 | 1.00 | 34.27 | C |
| ATOM | 159 | CG | PRO | A | 21 | 54.259 | 85.299 | 32.669 | 1.00 | 35.00 | C |
| ATOM | 160 | CD | PRO | A | 21 | 54.046 | 84.995 | 34.410 | 1.00 | 34.41 | C |
| ATOM | 161 | N | ARG | A | 22 | 51.811 | 82.729 | 32.312 | 1.00 | 31.94 | N |
| ATOM | 162 | CA | ARG | A | 22 | 51.282 | 81.556 | 31.590 | 1.00 | 31.35 | C |
| ATOM | 163 | C | ARG | A | 22 | 49.779 | 81.417 | 31.825 | 1.00 | 30.81 | C |
| ATOM | 164 | O | ARG | A | 22 | 49.032 | 81.014 | 30.924 | 1.00 | 30.86 | O |
| ATOM | 165 | CB | ARG | A | 22 | 51.960 | 80.271 | 32.076 | 1.00 | 31.04 | C |
| ATOM | 166 | CG | ARG | A | 22 | 51.315 | 78.975 | 31.514 | 1.00 | 29.58 | C |
| ATOM | 167 | CD | ARG | A | 22 | 51.538 | 78.866 | 29.996 | 1.00 | 29.21 | C |
| ATOM | 168 | NE | ARG | A | 22 | 51.029 | 77.592 | 29.477 | 1.00 | 28.75 | N |

| ATOM | 169 | CZ | ARG A | 22 | 49.752 | 77.376 | 29.140 | 1.00 | 29.25 | C |
|------|-----|-----|-------|-----|--------|--------|--------|------|-------|---|
| ATOM | 170 | NH1 | ARG A | 22 | 48.851 | 78.360 | 29.259 | 1.00 | 26.39 | N |
| ATOM | 171 | NH2 | ARG A | 22 | 49.363 | 76.160 | 28.710 | 1.00 | 27.04 | N |
| ATOM | 172 | N | TRP A | 23 | 49.333 | 81.756 | 33.027 | 1.00 | 31.07 | N |
| ATOM | 173 | CA | TRP A | 23 | 47.926 | 81.610 | 33.389 | 1.00 | 32.46 | C |
| ATOM | 174 | C | TRP A | 23 | 47.051 | 82.852 | 33.266 | 1.00 | 33.48 | C |
| ATOM | 175 | O | TRP A | 23 | 45.921 | 82.884 | 33.766 | 1.00 | 33.99 | O |
| ATOM | 176 | CB | TRP A | 23 | 47.814 | 81.008 | 34.804 | 1.00 | 32.08 | C |
| ATOM | 177 | CG | TRP A | 23 | 48.690 | 79.746 | 34.952 | 1.00 | 32.32 | C |
| ATOM | 178 | CD1 | TRP A | 23 | 49.706 | 79.542. | 35.850 | 1.00 | 31.64 | C |
| ATOM | 179 | CD2 | TRP A | 23 | 48.653 | 78.572 | 34.110 | 1.00 | 31.55 | C |
| ATOM | 180 | NE1 | TRP A | 23 | 50.310 | 78.321 | 35.617 | 1.00 | 32.13 | N |
| ATOM | 181 | CE2 | TRP A | 23 | 49.686 | 77.706 | 34.554 | 1.00 | 32.17 | C |
| ATOM | 182 | CE3 | TRP A | 23 | 47.850 | 78.176 | 33.027 | 1.00 | 31.06 | C |
| ATOM | 183 | CZ2 | TRP A | 23 | 49.942 | 76.457 | 33.945 | 1.00 | 31.46 | C |
| ATOM | 184 | CZ3 | TRP A | 23 | 48.103 | 76.927 | 32.414 | 1.00 | 31.21 | C |
| ATOM | 185 | CH2 | TRP A | 23 | 49.148 | 76.088 | 32.884 | 1.00 | 30.41 | C |
| ATOM | 186 | N | LYS A | 24 | 47.568 | 83.869 | 32.592 | 1.00 | 35.10 | N |
| ATOM | 187 | CA | LYS A | 24 | 46.805 | 85.098 | 32.362 | 1.00 | 36.91 | C |
| ATOM | 188 | C | LYS A | 24 | 45.521 | 84.720 | 31.595 | 1.00 | 37.10 | C |
| ATOM | 189 | O | LYS A | 24 | 45.584 | 84.046 | 30.567 | 1.00 | 37.11 | O |
| ATOM | 190 | CB | LYS A | 24 | 47.656 | 86.058 | 31.521 | 1.00 | 38.76 | C |
| ATOM | 191 | CG | LYS A | 24 | 46.875 | 87.185 | 30.858 | 1.00 | 42.20 | C |
| ATOM | 192 | CD | LYS A | 24 | 47.393 | 88.557 | 31.299 | 1.00 | 44.91 | C |
| ATOM | 193 | CE | LYS A | 24 | 46.747 | 89.700 | 30.502 | 1.00 | 46.09 | C |
| ATOM | 194 | NZ | LYS A | 24 | 45.243 | 89.758 | 30.662 | 1.00 | 47.80 | N |
| ATOM | 195 | N | ASP A | 25 | 44.354 | 85.124 | 32.082 | 1.00 | 37.36 | N |
| ATOM | 196 | CA | ASP A | 25 | 43.123 | 84.797 | 31.353 | 1.00 | 37.51 | C |
| ATOM | 197 | C | ASP A | 25 | 42.821 | 83.298 | 31.206 | 1.00 | 37.11 | C |
| ATOM | 198 | O | ASP A | 25 | 42.235 | 82.862 | 30.204 | 1.00 | 36.17 | O |
| ATOM | 199 | CB | ASP A | 25 | 43.152 | 85.429 | 29.958 | 1.00 | 39.67 | C |
| ATOM | 200 | CG | ASP A | 25 | 43.079 | 86.962 | 30.017 | 1.00 | 41.79 | C |
| ATOM | 201 | OD1 | ASP A | 25 | 42.295 | 87.484 | 30.861 | 1.00 | 41.52 | O |
| ATOM | 202 | OD2 | ASP A | 25 | 43.804 | 87.615 | 29.228 | 1.00 | 43.09 | O |
| ATOM | 203 | N | VAL A | 26 | 43.256 | 82.507 | 32.185 | 1.00 | 35.70 | N |
| ATOM | 204 | CA | VAL A | 26 | 42.940 | 81.094 | 32.161 | 1.00 | 34.01 | C |
| ATOM | 205 | C | VAL A | 26 | 41.938 | 80.890 | 33.294 | 1.00 | 33.38 | C |
| ATOM | 206 | O | VAL A | 26 | 42.249 | 81.127 | 34.476 | 1.00 | 33.18 | O |
| ATOM | 207 | CB | VAL A | 26 | 44.185 | 80.221 | 32.399 | 1.00 | 33.76 | C |
| ATOM | 208 | CG1 | VAL A | 26 | 43.769 | 78.795 | 32.767 | 1.00 | 33.10 | C |
| ATOM | 209 | CG2 | VAL A | 26 | 45.057 | 80.227 | 31.128 | 1.00 | 33.12 | C |
| ATOM | 210 | N | THR A | 27 | 40.726 | 80.485 | 32.941 | 1.00 | 31.87 | N |
| ATOM | 211 | CA | THR A | 27 | 39.733 | 80.213 | 33.961 | 1.00 | 31.94 | C |
| ATOM | 212 | C | THR A | 27 | 39.793 | 78.760 | 34.414 | 1.00 | 31.87 | C |
| ATOM | 213 | O | THR A | 27 | 39.869 | 77.836 | 33.586 | 1.00 | 31.55 | O |
| ATOM | 214 | CB | THR A | 27 | 38.313 | 80.445 | 33.445 | 1.00 | 32.13 | C |
| ATOM | 215 | OG1 | THR A | 27 | 38.178 | 81.807 | 33.057 | 1.00 | 32.91 | O |
| ATOM | 216 | CG2 | THR A | 27 | 37.276 | 80.127 | 34.533 | 1.00 | 32.02 | C |
| ATOM | 217 | N | ARG A | 28 | 39.751 | 78.571 | 35.724 | 1.00 | 30.93 | N |
| ATOM | 218 | CA | ARG A | 28 | 39.710 | 77.248 | 36.328 | 1.00 | 31.05 | C |
| ATOM | 219 | C | ARG A | 28 | 38.519 | 77.335 | 37.260 | 1.00 | 31.32 | C |
| ATOM | 220 | O | ARG A | 28 | 38.508 | 78.171 | 38.176 | 1.00 | 31.92 | O |
| ATOM | 221 | CB | ARG A | 28 | 40.988 | 76.943 | 37.116 | 1.00 | 29.82 | C |
| ATOM | 222 | CG | ARG A | 28 | 42.216 | 76.759 | 36.244 | 1.00 | 28.87 | C |
| ATOM | 223 | CD | ARG A | 28 | 43.455 | 76.665 | 37.101 | 1.00 | 28.48 | C |
| ATOM | 224 | NE | ARG A | 28 | 44.613 | 75.998 | 36.480 | 1.00 | 28.31 | N |
| ATOM | 225 | CZ | ARG A | 28 | 45.630 | 76.619 | 35.864 | 1.00 | 29.19 | C |
| ATOM | 226 | NH1 | ARG A | 28 | 45.641 | 77.965 | 35.751 | 1.00 | 28.04 | N |
| ATOM | 227 | NH2 | ARG A | 28 | 46.680 | 75.906 | 35.422 | 1.00 | 26.67 | N |
| ATOM | 228 | N | THR A | 29 | 37.504 | 76.514 | 37.023 | 1.00 | 30.81 | N |
| ATOM | 229 | CA | THR A | 29 | 36.342 | 76.552 | 37.873 | 1.00 | 30.85 | C |
| ATOM | 230 | C | THR A | 29 | 36.484 | 75.725 | 39.135 | 1.00 | 30.94 | C |
| ATOM | 231 | O | THR A | 29 | 35.576 | 75.723 | 39.957 | 1.00 | 31.38 | O |
| ATOM | 232 | CB | THR A | 29 | 35.052 | 76.146 | 37.117 | 1.00 | 30.97 | C |
| ATOM | 233 | OG1 | THR A | 29 | 35.233 | 74.865 | 36.479 | 1.00 | 30.09 | O |
| ATOM | 234 | CG2 | THR A | 29 | 34.713 | 77.217 | 36.080 | 1.00 | 29.84 | C |
| ATOM | 235 | N | TYR A | 30 | 37.618 | 75.047 | 39.299 | 1.00 | 30.02 | N |
| ATOM | 236 | CA | TYR A | 30 | 37.880 | 74.249 | 40.498 | 1.00 | 29.58 | C |
| ATOM | 237 | C | TYR A | 30 | 39.000 | 74.998 | 41.224 | 1.00 | 30.21 | C |
| ATOM | 238 | O | TYR A | 30 | 39.602 | 75.911 | 40.659 | 1.00 | 30.72 | O |
| ATOM | 239 | CB | TYR A | 30 | 38.349 | 72.822 | 40.141 | 1.00 | 27.23 | C |
| ATOM | 240 | CG | TYR A | 30 | 39.398 | 72.811 | 39.054 | 1.00 | 26.60 | C |
| ATOM | 241 | CD1 | TYR A | 30 | 40.746 | 73.054 | 39.343 | 1.00 | 25.87 | C |
| ATOM | 242 | CD2 | TYR A | 30 | 39.038 | 72.567 | 37.722 | 1.00 | 26.16 | C |
| ATOM | 243 | CE1 | TYR A | 30 | 41.713 | 73.045 | 38.326 | 1.00 | 25.73 | C |
| ATOM | 244 | CE2 | TYR A | 30 | 40.003 | 72.562 | 36.695 | 1.00 | 26.33 | C |
| ATOM | 245 | CZ | TYR A | 30 | 41.336 | 72.801 | 37.015 | 1.00 | 26.01 | C |
| ATOM | 246 | OH | TYR A | 30 | 42.290 | 72.778 | 36.015 | 1.00 | 25.76 | O |
| ATOM | 247 | N | SER A | 31 | 39.320 | 74.573 | 42.436 | 1.00 | 31.01 | N |
| ATOM | 248 | CA | SER A | 31 | 40.337 | 75.259 | 43.248 | 1.00 | 32.09 | C |

| ATOM | 249 | C | SER A | 31 | 41.709 | 74.611 | 43.325 | 1.00 | 32.45 | C |
|------|-----|-----|-------|----|--------|--------|--------|------|-------|---|
| ATOM | 250 | O | SER A | 31 | 41.892 | 73.429 | 42.966 | 1.00 | 31.29 | O |
| ATOM | 251 | CB | SER A | 31 | 39.826 | 75.376 | 44.671 | 1.00 | 32.43 | C |
| ATOM | 252 | OG | SER A | 31 | 39.792 | 74.074 | 45.243 | 1.00 | 32.95 | O |
| ATOM | 253 | N | ALA A | 32 | 42.675 | 75.373 | 43.834 | 1.00 | 32.41 | N |
| ATOM | 254 | CA | ALA A | 32 | 44.007 | 74.814 | 43.984 | 1.00 | 32.69 | C |
| ATOM | 255 | C | ALA A | 32 | 43.918 | 73.644 | 44.967 | 1.00 | 33.10 | C |
| ATOM | 256 | O | ALA A | 32 | 44.579 | 72.605 | 44.790 | 1.00 | 32.26 | O |
| ATOM | 257 | CB | ALA A | 32 | 44.972 | 75.870 | 44.487 | 1.00 | 33.42 | C |
| ATOM | 258 | N | GLU A | 33 | 43.084 | 73.787 | 46.002 | 1.00 | 33.01 | N |
| ATOM | 259 | CA | GLU A | 33 | 42.961 | 72.712 | 46.976 | 1.00 | 33.95 | C |
| ATOM | 260 | C | GLU A | 33 | 42.338 | 71.448 | 46.338 | 1.00 | 32.90 | C |
| ATOM | 261 | O | GLU A | 33 | 42.645 | 70.323 | 46.726 | 1.00 | 32.03 | O |
| ATOM | 262 | CB | GLU A | 33 | 42.141 | 73.182 | 48.190 | 1.00 | 36.09 | C |
| ATOM | 263 | CG | GLU A | 33 | 42.054 | 72.140 | 49.322 | 1.00 | 40.87 | C |
| ATOM | 264 | CD | GLU A | 33 | 43.347 | 71.259 | 49.519 | 1.00 | 44.11 | C |
| ATOM | 265 | OE1 | GLU A | 33 | 44.429 | 71.833 | 49.926 | 1.00 | 44.70 | O |
| ATOM | 266 | OE2 | GLU A | 33 | 43.251 | 69.991 | 49.265 | 1.00 | 43.28 | O |
| ATOM | 267 | N | ASP A | 34 | 41.443 | 71.651 | 45.375 | 1.00 | 32.04 | N |
| ATOM | 268 | CA | ASP A | 34 | 40.824 | 70.528 | 44.656 | 1.00 | 31.44 | C |
| ATOM | 269 | C | ASP A | 34 | 41.939 | 69.765 | 43.913 | 1.00 | 30.08 | C |
| ATOM | 270 | O | ASP A | 34 | 41.895 | 68.534 | 43.823 | 1.00 | 29.96 | O |
| ATOM | 271 | CB | ASP A | 34 | 39.830 | 71.023 | 43.601 | 1.00 | 31.92 | C |
| ATOM | 272 | CG | ASP A | 34 | 38.521 | 71.518 | 44.189 | 1.00 | 33.10 | C |
| ATOM | 273 | OD1 | ASP A | 34 | 38.155 | 71.068 | 45.305 | 1.00 | 33.43 | O |
| ATOM | 274 | OD2 | ASP A | 34 | 37.857 | 72.340 | 43.504 | 1.00 | 32.83 | O |
| ATOM | 275 | N | VAL A | 35 | 42.917 | 70.491 | 43.378 | 1.00 | 28.50 | N |
| ATOM | 276 | CA | VAL A | 35 | 44.015 | 69.845 | 42.630 | 1.00 | 27.98 | C |
| ATOM | 277 | C | VAL A | 35 | 44.867 | 69.001 | 43.569 | 1.00 | 28.04 | C |
| ATOM | 278 | O | VAL A | 35 | 45.123 | 67.814 | 43.304 | 1.00 | 26.71 | O |
| ATOM | 279 | CB | VAL A | 35 | 44.890 | 70.892 | 41.887 | 1.00 | 26.62 | C |
| ATOM | 280 | CG1 | VAL A | 35 | 46.141 | 70.246 | 41.278 | 1.00 | 26.27 | C |
| ATOM | 281 | CG2 | VAL A | 35 | 44.064 | 71.526 | 40.773 | 1.00 | 26.39 | C |
| ATOM | 282 | N | VAL A | 36 | 45.261 | 69.606 | 44.697 | 1.00 | 27.76 | N |
| ATOM | 283 | CA | VAL A | 36 | 46.083 | 68.918 | 45.678 | 1.00 | 27.57 | C |
| ATOM | 284 | C | VAL A | 36 | 45.381 | 67.674 | 46.206 | 1.00 | 26.93 | C |
| ATOM | 285 | O | VAL A | 36 | 46.001 | 66.620 | 46.389 | 1.00 | 26.46 | O |
| ATOM | 286 | CB | VAL A | 36 | 46.431 | 69.852 | 46.908 | 1.00 | 28.79 | C |
| ATOM | 287 | CG1 | VAL A | 36 | 47.056 | 69.003 | 48.064 | 1.00 | 28.46 | C |
| ATOM | 288 | CG2 | VAL A | 36 | 47.360 | 70.977 | 46.465 | 1.00 | 28.18 | C |
| ATOM | 289 | N | ALA A | 37 | 44.092 | 67.790 | 46.455 | 1.00 | 26.81 | N |
| ATOM | 290 | CA | ALA A | 37 | 43.335 | 66.653 | 46.976 | 1.00 | 27.59 | C |
| ATOM | 291 | C | ALA A | 37 | 43.384 | 65.408 | 46.063 | 1.00 | 27.56 | C |
| ATOM | 292 | O | ALA A | 37 | 43.202 | 64.301 | 46.533 | 1.00 | 27.91 | O |
| ATOM | 293 | CB | ALA A | 37 | 41.891 | 67.069 | 47.216 | 1.00 | 27.10 | C |
| ATOM | 294 | N | LEU A | 38 | 43.637 | 65.592 | 44.768 | 1.00 | 27.53 | N |
| ATOM | 295 | CA | LEU A | 38 | 43.674 | 64.451 | 43.819 | 1.00 | 27.29 | C |
| ATOM | 296 | C | LEU A | 38 | 45.081 | 63.926 | 43.538 | 1.00 | 27.75 | C |
| ATOM | 297 | O | LEU A | 38 | 45.246 | 62.973 | 42.753 | 1.00 | 26.87 | O |
| ATOM | 298 | CB | LEU A | 38 | 43.042 | 64.884 | 42.489 | 1.00 | 26.85 | C |
| ATOM | 299 | CG | LEU A | 38 | 41.557 | 65.269 | 42.514 | 1.00 | 26.12 | C |
| ATOM | 300 | CD1 | LEU A | 38 | 41.178 | 65.921 | 41.203 | 1.00 | 25.65 | C |
| ATOM | 301 | CD2 | LEU A | 38 | 40.701 | 64.022 | 42.779 | 1.00 | 25.47 | C |
| ATOM | 302 | N | GLN A | 39 | 46.097 | 64.530 | 44.168 | 1.00 | 27.04 | N |
| ATOM | 303 | CA | GLN A | 39 | 47.476 | 64.142 | 43.895 | 1.00 | 27.87 | C |
| ATOM | 304 | C | GLN A | 39 | 48.109 | 63.061 | 44.774 | 1.00 | 27.94 | C |
| ATOM | 305 | O | GLN A | 39 | 49.273 | 62.736 | 44.605 | 1.00 | 28.36 | O |
| ATOM | 306 | CB | GLN A | 39 | 48.380 | 65.392 | 43.902 | 1.00 | 27.99 | C |
| ATOM | 307 | CG | GLN A | 39 | 48.166 | 66.368 | 42.733 | 1.00 | 28.54 | C |
| ATOM | 308 | CD | GLN A | 39 | 49.075 | 67.603 | 42.855 | 1.00 | 29.74 | C |
| ATOM | 309 | OE1 | GLN A | 39 | 49.311 | 68.088 | 43.981 | 1.00 | 29.55 | O |
| ATOM | 310 | NE2 | GLN A | 39 | 49.568 | 68.127 | 41.716 | 1.00 | 28.70 | N |
| ATOM | 311 | N | GLY A | 40 | 47.362 | 62.506 | 45.710 | 1.00 | 28.51 | N |
| ATOM | 312 | CA | GLY A | 40 | 47.947 | 61.486 | 46.550 | 1.00 | 28.79 | C |
| ATOM | 313 | C | GLY A | 40 | 49.131 | 62.064 | 47.318 | 1.00 | 30.08 | C |
| ATOM | 314 | O | GLY A | 40 | 49.189 | 63.277 | 47.584 | 1.00 | 29.54 | O |
| ATOM | 315 | N | SER A | 41 | 50.114 | 61.237 | 47.651 | 1.00 | 29.43 | N |
| ATOM | 316 | CA | SER A | 41 | 51.213 | 61.800 | 48.412 | 1.00 | 29.98 | C |
| ATOM | 317 | C | SER A | 41 | 52.537 | 61.891 | 47.646 | 1.00 | 29.68 | C |
| ATOM | 318 | O | SER A | 41 | 53.550 | 62.334 | 48.192 | 1.00 | 29.35 | O |
| ATOM | 319 | CB | SER A | 41 | 51.348 | 61.015 | 49.710 | 1.00 | 30.91 | C |
| ATOM | 320 | OG | SER A | 41 | 51.834 | 59.740 | 49.450 | 1.00 | 31.77 | O |
| ATOM | 321 | N | VAL A | 42 | 52.522 | 61.513 | 46.368 | 1.00 | 27.86 | N |
| ATOM | 322 | CA | VAL A | 42 | 53.724 | 61.594 | 45.548 | 1.00 | 27.79 | C |
| ATOM | 323 | C | VAL A | 42 | 53.270 | 62.010 | 44.165 | 1.00 | 27.76 | C |
| ATOM | 324 | O | VAL A | 42 | 52.273 | 61.488 | 43.670 | 1.00 | 26.61 | O |
| ATOM | 325 | CB | VAL A | 42 | 54.469 | 60.227 | 45.463 | 1.00 | 27.77 | C |
| ATOM | 326 | CG1 | VAL A | 42 | 55.694 | 60.327 | 44.510 | 1.00 | 27.60 | C |
| ATOM | 327 | CG2 | VAL A | 42 | 54.976 | 59.838 | 46.844 | 1.00 | 28.77 | C |
| ATOM | 328 | N | VAL A | 43 | 53.953 | 62.994 | 43.575 | 1.00 | 26.73 | N |

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ATOM    329  CA   VAL A  43      53.626  63.448  42.239  1.00 25.96           C
ATOM    330  C    VAL A  43      54.807  63.084  41.342  1.00 26.24           C
ATOM    331  O    VAL A  43      55.908  63.571  41.542  1.00 24.85           O
ATOM    332  CB   VAL A  43      53.433  64.999  42.170  1.00 27.03           C
ATOM    333  CG1  VAL A  43      53.328  65.456  40.671  1.00 26.40           C
ATOM    334  CG2  VAL A  43      52.181  65.393  42.945  1.00 25.47           C
ATOM    335  N    GLU A  44      54.593  62.166  40.396  1.00 25.21           N
ATOM    336  CA   GLU A  44      55.634  61.821  39.458  1.00 24.31           C
ATOM    337  C    GLU A  44      55.928  63.065  38.585  1.00 24.70           C
ATOM    338  O    GLU A  44      54.993  63.767  38.113  1.00 24.11           O
ATOM    339  CB   GLU A  44      55.173  60.681  38.523  1.00 23.11           C
ATOM    340  CG   GLU A  44      55.129  59.286  39.150  1.00 23.21           C
ATOM    341  CD   GLU A  44      54.649  58.241  38.134  1.00 24.19           C
ATOM    342  OE1  GLU A  44      53.424  58.214  37.876  1.00 24.14           O
ATOM    343  OE2  GLU A  44      55.482  57.477  37.596  1.00 22.91           O
ATOM    344  N    GLU A  45      57.210  63.323  38.374  1.00 24.55           N
ATOM    345  CA   GLU A  45      57.662  64.392  37.488  1.00 25.27           C
ATOM    346  C    GLU A  45      57.532  63.874  36.034  1.00 24.99           C
ATOM    347  O    GLU A  45      57.861  62.725  35.748  1.00 26.08           O
ATOM    348  CB   GLU A  45      59.139  64.706  37.775  1.00 27.46           C
ATOM    349  CG   GLU A  45      59.836  65.582  36.709  1.00 30.80           C
ATOM    350  CD   GLU A  45      59.272  67.004  36.612  1.00 34.09           C
ATOM    351  OE1  GLU A  45      58.180  67.253  37.145  1.00 36.66           O
ATOM    352  OE2  GLU A  45      59.909  67.889  35.978  1.00 36.29           O
ATOM    353  N    HIS A  46      57.033  64.700  35.127  1.00 23.76           N
ATOM    354  CA   HIS A  46      56.892  64.322  33.716  1.00 23.69           C
ATOM    355  C    HIS A  46      57.786  65.301  32.955  1.00 23.50           C
ATOM    356  O    HIS A  46      57.321  66.329  32.448  1.00 23.36           O
ATOM    357  CB   HIS A  46      55.412  64.467  33.296  1.00 23.44           C
ATOM    358  CG   HIS A  46      54.496  63.552  34.046  1.00 23.04           C
ATOM    359  ND1  HIS A  46      54.567  62.175  33.932  1.00 23.99           N
ATOM    360  CD2  HIS A  46      53.492  63.808  34.915  1.00 23.57           C
ATOM    361  CE1  HIS A  46      53.635  61.628  34.698  1.00 23.32           C
ATOM    362  NE2  HIS A  46      52.966  62.597  35.300  1.00 23.57           N
ATOM    363  N    THR A  47      59.077  64.970  32.889  1.00 24.00           N
ATOM    364  CA   THR A  47      60.066  65.857  32.280  1.00 24.28           C
ATOM    365  C    THR A  47      59.748  66.286  30.866  1.00 24.52           C
ATOM    366  O    THR A  47      59.715  67.503  30.556  1.00 23.41           O
ATOM    367  CB   THR A  47      61.451  65.190  32.319  1.00 24.61           C
ATOM    368  OG1  THR A  47      61.728  64.835  33.676  1.00 24.71           O
ATOM    369  CG2  THR A  47      62.555  66.118  31.779  1.00 24.41           C
ATOM    370  N    LEU A  48      59.492  65.305  30.002  1.00 23.24           N
ATOM    371  CA   LEU A  48      59.234  65.656  28.620  1.00 23.06           C
ATOM    372  C    LEU A  48      57.959  66.438  28.447  1.00 22.59           C
ATOM    373  O    LEU A  48      57.885  67.313  27.589  1.00 22.99           O
ATOM    374  CB   LEU A  48      59.247  64.404  27.728  1.00 23.23           C
ATOM    375  CG   LEU A  48      60.601  63.645  27.684  1.00 24.81           C
ATOM    376  CD1  LEU A  48      60.582  62.575  26.581  1.00 25.06           C
ATOM    377  CD2  LEU A  48      61.771  64.627  27.368  1.00 24.85           C
ATOM    378  N    ALA A  49      56.945  66.138  29.241  1.00 23.03           N
ATOM    379  CA   ALA A  49      55.698  66.882  29.113  1.00 23.20           C
ATOM    380  C    ALA A  49      55.910  68.321  29.593  1.00 23.86           C
ATOM    381  O    ALA A  49      55.324  69.244  29.046  1.00 23.45           O
ATOM    382  CB   ALA A  49      54.593  66.244  29.932  1.00 22.10           C
ATOM    383  N    ARG A  50      56.692  68.496  30.652  1.00 24.39           N
ATOM    384  CA   ARG A  50      56.912  69.847  31.168  1.00 25.08           C
ATOM    385  C    ARG A  50      57.749  70.652  30.177  1.00 24.75           C
ATOM    386  O    ARG A  50      57.350  71.737  29.730  1.00 24.90           O
ATOM    387  CB   ARG A  50      57.612  69.763  32.520  1.00 26.21           C
ATOM    388  CG   ARG A  50      58.447  70.975  32.898  1.00 29.17           C
ATOM    389  CD   ARG A  50      58.750  70.873  34.382  1.00 31.92           C
ATOM    390  NE   ARG A  50      57.572  71.495  34.920  1.00 36.55           N
ATOM    391  CZ   ARG A  50 .    56.696  70.969  35.748  1.00 35.08           C
ATOM    392  NH1  ARG A  50      56.813  69.727  36.232  1.00 35.07           N
ATOM    393  NH2  ARG A  50      55.665  71.735  36.035  1.00 35.75           N
ATOM    394  N    ARG A  51      58.891  70.106  29.801  1.00 24.62           N
ATOM    395  CA   ARG A  51      59.778  70.799  28.877  1.00 24.96           C
ATOM    396  C    ARG A  51      59.084  71.094  27.542  1.00 25.46           C
ATOM    397  O    ARG A  51      59.177  72.216  27.002  1.00 24.49           O
ATOM    398  CB   ARG A  51      61.047  69.967  28.649  1.00 24.91           C
ATOM    399  CG   ARG A  51      62.158  70.664  27.818  1.00 26.14           C
ATOM    400  CD   ARG A  51      63.374  69.727  27.694  1.00 28.39           C
ATOM    401  NE   ARG A  51      64.542  70.350  27.088  1.00 29.57           N
ATOM    402  CZ   ARG A  51      64.686  70.645  25.794  1.00 31.29           C
ATOM    403  NH1  ARG A  51      63.725  70.375  24.896  1.00 30.48           N
ATOM    404  NH2  ARG A  51      65.803  71.262  25.394  1.00 31.56           N
ATOM    405  N    GLY A  52      58.346  70.099  27.011  1.00 24.31           N
ATOM    406  CA   GLY A  52      57.657  70.309  25.745  1.00 22.90           C
ATOM    407  C    GLY A  52      56.653  71.447  25.792  1.00 23.42           C
ATOM    408  O    GLY A  52      56.635  72.334  24.909  1.00 23.95           O
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ATOM    409  N    ALA A  53      55.816  71.419  26.818  1.00 23.31      N
ATOM    410  CA   ALA A  53      54.789  72.427  27.013  1.00 24.78      C
ATOM    411  C    ALA A  53      55.426  73.831  27.201  1.00 24.91      C
ATOM    412  O    ALA A  53      54.918  74.799  26.651  1.00 25.45      O
ATOM    413  CB   ALA A  53      53.915  72.071  28.242  1.00 22.48      C
ATOM    414  N    GLU A  54      56.498  73.936  27.993  1.00 25.81      N
ATOM    415  CA   GLU A  54      57.152  75.255  28.199  1.00 27.11      C
ATOM    416  C    GLU A  54      57.751  75.747  26.889  1.00 27.11      C
ATOM    417  O    GLU A  54      57.596  76.915  26.537  1.00 27.51      O
ATOM    418  CB   GLU A  54      58.241  75.187  29.314  1.00 27.29      C
ATOM    419  CG   GLU A  54      57.649  74.806  30.648  1.00 28.53      C
ATOM    420  CD   GLU A  54      58.630  74.883  31.811  1.00 29.39      C
ATOM    421  OE1  GLU A  54      59.838  74.892  31.597  1.00 31.35      O
ATOM    422  OE2  GLU A  54      58.173  74.915  32.958  1.00 31.01      O
ATOM    423  N    VAL A  55      58.409  74.851  26.154  1.00 27.29      N
ATOM    424  CA   VAL A  55      59.011  75.212  24.881  1.00 27.69      C
ATOM    425  C    VAL A  55      57.954  75.639  23.878  1.00 28.42      C
ATOM    426  O    VAL A  55      58.093  76.679  23.199  1.00 29.33      O
ATOM    427  CB   VAL A  55      59.838  74.049  24.284  1.00 27.44      C
ATOM    428  CG1  VAL A  55      60.195  74.362  22.809  1.00 27.33      C
ATOM    429  CG2  VAL A  55      61.118  73.858  25.095  1.00 27.59      C
ATOM    430  N    LEU A  56      56.870  74.875  23.792  1.00 28.25      N
ATOM    431  CA   LEU A  56      55.815  75.224  22.857  1.00 27.67      C
ATOM    432  C    LEU A  56      55.241  76.613  23.163  1.00 28.39      C
ATOM    433  O    LEU A  56      55.067  77.434  22.260  1.00 28.14      O
ATOM    434  CB   LEU A  56      54.688  74.178  22.912  1.00 27.52      C
ATOM    435  CG   LEU A  56      53.459  74.366  22.000  1.00 27.49      C
ATOM    436  CD1  LEU A  56      53.879  74.500  20.543  1.00 27.11      C
ATOM    437  CD2  LEU A  56      52.517  73.164  22.179  1.00 27.69      C
ATOM    438  N    TRP A  57      54.914  76.854  24.433  1.00 28.69      N
ATOM    439  CA   TRP A  57      54.341  78.129  24.849  1.00 29.01      C
ATOM    440  C    TRP A  57      55.278  79.301  24.454  1.00 29.61      C
ATOM    441  O    TRP A  57      54.835  80.286  23.901  1.00 29.36      O
ATOM    442  CB   TRP A  57      54.094  78.117  26.361  1.00 29.05      C
ATOM    443  CG   TRP A  57      53.403  79.370  26.852  1.00 29.41      C
ATOM    444  CD1  TRP A  57      53.959  80.374  27.609  1.00 29.57      C
ATOM    445  CD2  TRP A  57      52.036  79.742  26.640  1.00 29.44      C
ATOM    446  NE1  TRP A  57      53.018  81.330  27.891  1.00 29.31      N
ATOM    447  CE2  TRP A  57      51.829  80.973  27.310  1.00 30.21      C
ATOM    448  CE3  TRP A  57      50.962  79.161  25.950  1.00 30.05      C
ATOM    449  CZ2  TRP A  57      50.602  81.622  27.309  1.00 30.15      C
ATOM    450  CZ3  TRP A  57      49.731  79.821  25.950  1.00 30.28      C
ATOM    451  CH2  TRP A  57      49.567  81.036  26.629  1.00 30.25      C
ATOM    452  N    GLU A  58      56.567  79.174  24.714  1.00 30.56      N
ATOM    453  CA   GLU A  58      57.482  80.225  24.333  1.00 32.54      C
ATOM    454  C    GLU A  58      57.539  80.401  22.813  1.00 32.68      C
ATOM    455  O    GLU A  58      57.560  81.559  22.325  1.00 31.98      O
ATOM    456  CB   GLU A  58      58.890  79.953  24.894  1.00 34.36      C
ATOM    457  CG   GLU A  58      58.933  79.975  26.421  1.00 37.61      C
ATOM    458  CD   GLU A  58      58.338  81.270  27.018  1.00 40.17      C
ATOM    459  OE1  GLU A  58      58.842  82.370  26.645  1.00 42.68      O
ATOM    460  OE2  GLU A  58      57.377  81.202  27.853  1.00 40.83      O
ATOM    461  N    GLN A  59      57.574  79.282  22.071  1.00 31.90      N
ATOM    462  CA   GLN A  59      57.642  79.344  20.611  1.00 31.56      C
ATOM    463  C    GLN A  59      56.425  80.056  20.057  1.00 31.76      C
ATOM    464  O    GLN A  59      56.531  80.785  19.076  1.00 30.81      O
ATOM    465  CB   GLN A  59      57.713  77.947  19.972  1.00 32.08      C
ATOM    466  CG   GLN A  59      59.023  77.184  20.199  1.00 32.47      C
ATOM    467  CD   GLN A  59      58.990  75.787  19.561  1.00 33.62      C
ATOM    468  OE1  GLN A  59      57.936  75.181  19.444  1.00 35.27      O
ATOM    469  NE2  GLN A  59      60.132  75.278  19.178  1.00 33.41      N
ATOM    470  N    LEU A  60      55.262  79.832  20.672  1.00 31.47      N
ATOM    471  CA   LEU A  60      54.026  80.457  20.206  1.00 31.18      C
ATOM    472  C    LEU A  60      54.072  81.992  20.345  1.00 32.27      C
ATOM    473  O    LEU A  60      53.311  82.706  19.679  1.00 31.45      O
ATOM    474  CB   LEU A  60      52.819  79.913  20.995  1.00 29.98      C
ATOM    475  CG   LEU A  60      52.486  78.436  20.695  1.00 29.56      C
ATOM    476  CD1  LEU A  60      51.452  77.953  21.709  1.00 28.43      C
ATOM    477  CD2  LEU A  60      51.969  78.298  19.226  1.00 28.10      C
ATOM    478  N    HIS A  61      54.937  82.482  21.227  1.00 33.04      N
ATOM    479  CA   HIS A  61      55.074  83.929  21.432  1.00 34.57      C
ATOM    480  C    HIS A  61      56.323  84.464  20.704  1.00 35.75      C
ATOM    481  O    HIS A  61      56.304  85.584  20.193  1.00 36.66      O
ATOM    482  CB   HIS A  61      55.151  84.240  22.935  1.00 34.39      C
ATOM    483  CG   HIS A  61      53.910  83.861  23.674  1.00 35.57      C
ATOM    484  ND1  HIS A  61      52.857  84.734  23.866  1.00 36.78      N
ATOM    485  CD2  HIS A  61      53.507  82.674  24.184  1.00 35.18      C
ATOM    486  CE1  HIS A  61      51.859  84.099  24.464  1.00 36.42      C
ATOM    487  NE2  HIS A  61      52.231  82.846  24.666  1.00 36.36      N
ATOM    488  N    ASP A  62      57.377  83.658  20.608  1.00 35.99      N
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| ATOM | 489 | CA  | ASP | A | 62 | 58.622 | 84.091 | 19.951 | 1.00 | 36.22 | C |
|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 490 | C   | ASP | A | 62 | 58.694 | 83.984 | 18.424 | 1.00 | 36.47 | C |
| ATOM | 491 | O   | ASP | A | 62 | 59.342 | 84.822 | 17.778 | 1.00 | 35.78 | O |
| ATOM | 492 | CB  | ASP | A | 62 | 59.814 | 83.331 | 20.507 | 1.00 | 36.90 | C |
| ATOM | 493 | CG  | ASP | A | 62 | 59.998 | 83.544 | 21.973 | 1.00 | 38.60 | C |
| ATOM | 494 | OD1 | ASP | A | 62 | 59.309 | 84.417 | 22.531 | 1.00 | 40.44 | O |
| ATOM | 495 | OD2 | ASP | A | 62 | 60.837 | 82.851 | 22.589 | 1.00 | 39.42 | O |
| ATOM | 496 | N   | LEU | A | 63 | 58.068 | 82.958 | 17.841 | 1.00 | 35.12 | N |
| ATOM | 497 | CA  | LEU | A | 63 | 58.122 | 82.778 | 16.387 | 1.00 | 35.05 | C |
| ATOM | 498 | C   | LEU | A | 63 | 56.956 | 83.451 | 15.713 | 1.00 | 34.54 | C |
| ATOM | 499 | O   | LEU | A | 63 | 55.955 | 83.719 | 16.355 | 1.00 | 33.97 | O |
| ATOM | 500 | CB  | LEU | A | 63 | 58.112 | 81.288 | 16.035 | 1.00 | 35.30 | C |
| ATOM | 501 | CG  | LEU | A | 63 | 59.162 | 80.491 | 16.804 | 1.00 | 36.07 | C |
| ATOM | 502 | CD1 | LEU | A | 63 | 59.183 | 79.050 | 16.312 | 1.00 | 36.12 | C |
| ATOM | 503 | CD2 | LEU | A | 63 | 60.522 | 81.150 | 16.607 | 1.00 | 36.23 | C |
| ATOM | 504 | N   | GLU | A | 64 | 57.079 | 83.731 | 14.425 | 1.00 | 34.74 | N |
| ATOM | 505 | CA  | GLU | A | 64 | 55.972 | 84.364 | 13.679 | 1.00 | 35.42 | C |
| ATOM | 506 | C   | GLU | A | 64 | 54.735 | 83.435 | 13.782 | 1.00 | 34.21 | C |
| ATOM | 507 | O   | GLU | A | 64 | 53.594 | 83.874 | 13.847 | 1.00 | 34.27 | O |
| ATOM | 508 | CB  | GLU | A | 64 | 56.373 | 84.551 | 12.214 | 1.00 | 37.25 | C |
| ATOM | 509 | CG  | GLU | A | 64 | 55.705 | 85.738 | 11.555 | 1.00 | 40.33 | C |
| ATOM | 510 | CD  | GLU | A | 64 | 56.256 | 86.020 | 10.151 | 1.00 | 42.23 | C |
| ATOM | 511 | OE1 | GLU | A | 64 | 57.452 | 85.703 |  9.896 | 1.00 | 43.93 | O |
| ATOM | 512 | OE2 | GLU | A | 64 | 55.504 | 86.563 |  9.310 | 1.00 | 41.78 | O |
| ATOM | 513 | N   | TRP | A | 65 | 55.005 | 82.140 | 13.742 | 1.00 | 33.27 | N |
| ATOM | 514 | CA  | TRP | A | 65 | 54.002 | 81.095 | 13.917 | 1.00 | 31.89 | C |
| ATOM | 515 | C   | TRP | A | 65 | 54.770 | 79.776 | 13.990 | 1.00 | 31.49 | C |
| ATOM | 516 | O   | TRP | A | 65 | 55.946 | 79.684 | 13.571 | 1.00 | 30.98 | O |
| ATOM | 517 | CB  | TRP | A | 65 | 52.938 | 81.083 | 12.790 | 1.00 | 31.46 | C |
| ATOM | 518 | CG  | TRP | A | 65 | 53.315 | 80.479 | 11.464 | 1.00 | 32.61 | C |
| ATOM | 519 | CD1 | TRP | A | 65 | 53.077 | 79.185 | 11.037 | 1.00 | 32.72 | C |
| ATOM | 520 | CD2 | TRP | A | 65 | 53.908 | 81.162 | 10.341 | 1.00 | 32.47 | C |
| ATOM | 521 | NE1 | TRP | A | 65 | 53.483 | 79.035 |  9.725 | 1.00 | 32.21 | N |
| ATOM | 522 | CE2 | TRP | A | 65 | 53.996 | 80.228 |  9.277 | 1.00 | 33.16 | C |
| ATOM | 523 | CE3 | TRP | A | 65 | 54.367 | 82.474 | 10.131 | 1.00 | 32.81 | C |
| ATOM | 524 | CZ2 | TRP | A | 65 | 54.528 | 80.570 |  8.012 | 1.00 | 33.17 | C |
| ATOM | 525 | CZ3 | TRP | A | 65 | 54.897 | 82.817 |  8.873 | 1.00 | 32.86 | C |
| ATOM | 526 | CH2 | TRP | A | 65 | 54.971 | 81.863 |  7.835 | 1.00 | 33.57 | C |
| ATOM | 527 | N   | VAL | A | 66 | 54.118 | 78.777 | 14.568 | 1.00 | 30.16 | N |
| ATOM | 528 | CA  | VAL | A | 66 | 54.701 | 77.446 | 14.717 | 1.00 | 29.47 | C |
| ATOM | 529 | C   | VAL | A | 66 | 53.973 | 76.552 | 13.724 | 1.00 | 28.68 | C |
| ATOM | 530 | O   | VAL | A | 66 | 52.744 | 76.509 | 13.728 | 1.00 | 28.30 | O |
| ATOM | 531 | CB  | VAL | A | 66 | 54.446 | 76.903 | 16.146 | 1.00 | 29.61 | C |
| ATOM | 532 | CG1 | VAL | A | 66 | 54.984 | 75.476 | 16.282 | 1.00 | 28.96 | C |
| ATOM | 533 | CG2 | VAL | A | 66 | 55.087 | 77.838 | 17.165 | 1.00 | 30.18 | C |
| ATOM | 534 | N   | ASN | A | 67 | 54.694 | 75.863 | 12.851 | 1.00 | 28.10 | N |
| ATOM | 535 | CA  | ASN | A | 67 | 53.967 | 74.991 | 11.948 | 1.00 | 27.86 | C |
| ATOM | 536 | C   | ASN | A | 67 | 54.471 | 73.557 | 12.081 | 1.00 | 27.15 | C |
| ATOM | 537 | O   | ASN | A | 67 | 55.588 | 73.290 | 12.577 | 1.00 | 26.92 | O |
| ATOM | 538 | CB  | ASN | A | 67 | 53.964 | 75.508 | 10.488 | 1.00 | 28.62 | C |
| ATOM | 539 | CG  | ASN | A | 67 | 55.333 | 75.609 |  9.887 | 1.00 | 30.58 | C |
| ATOM | 540 | OD1 | ASN | A | 67 | 56.347 | 75.484 | 10.590 | 1.00 | 32.95 | O |
| ATOM | 541 | ND2 | ASN | A | 67 | 55.389 | 75.846 |  8.559 | 1.00 | 30.63 | N |
| ATOM | 542 | N   | ALA | A | 68 | 53.615 | 72.632 | 11.674 | 1.00 | 25.79 | N |
| ATOM | 543 | CA  | ALA | A | 68 | 53.928 | 71.222 | 11.845 | 1.00 | 25.09 | C |
| ATOM | 544 | C   | ALA | A | 68 | 53.249 | 70.349 | 10.810 | 1.00 | 24.44 | C |
| ATOM | 545 | O   | ALA | A | 68 | 52.361 | 70.810 | 10.054 | 1.00 | 24.88 | O |
| ATOM | 546 | CB  | ALA | A | 68 | 53.502 | 70.791 | 13.272 | 1.00 | 24.28 | C |
| ATOM | 547 | N   | LEU | A | 69 | 53.671 | 69.083 | 10.791 | 1.00 | 24.07 | N |
| ATOM | 548 | CA  | LEU | A | 69 | 53.152 | 68.077 |  9.852 | 1.00 | 23.35 | C |
| ATOM | 549 | C   | LEU | A | 69 | 52.789 | 66.825 | 10.674 | 1.00 | 23.04 | C |
| ATOM | 550 | O   | LEU | A | 69 | 53.535 | 66.458 | 11.585 | 1.00 | 21.54 | O |
| ATOM | 551 | CB  | LEU | A | 69 | 54.238 | 67.680 |  8.826 | 1.00 | 22.58 | C |
| ATOM | 552 | CG  | LEU | A | 69 | 54.692 | 68.820 |  7.867 | 1.00 | 24.13 | C |
| ATOM | 553 | CD1 | LEU | A | 69 | 55.767 | 68.303 |  6.934 | 1.00 | 22.77 | C |
| ATOM | 554 | CD2 | LEU | A | 69 | 53.520 | 69.347 |  7.063 | 1.00 | 22.64 | C |
| ATOM | 555 | N   | GLY | A | 70 | 51.652 | 66.201 | 10.354 | 1.00 | 23.08 | N |
| ATOM | 556 | CA  | GLY | A | 70 | 51.252 | 64.990 | 11.075 | 1.00 | 23.52 | C |
| ATOM | 557 | C   | GLY | A | 70 | 52.316 | 63.890 | 10.955 | 1.00 | 23.67 | C |
| ATOM | 558 | O   | GLY | A | 70 | 52.758 | 63.530 |  9.860 | 1.00 | 24.54 | O |
| ATOM | 559 | N   | ALA | A | 71 | 52.754 | 63.375 | 12.094 | 1.00 | 22.69 | N |
| ATOM | 560 | CA  | ALA | A | 71 | 53.737 | 62.318 | 12.140 | 1.00 | 22.69 | C |
| ATOM | 561 | C   | ALA | A | 71 | 53.074 | 61.067 | 12.756 | 1.00 | 22.63 | C |
| ATOM | 562 | O   | ALA | A | 71 | 52.383 | 61.184 | 13.796 | 1.00 | 21.73 | O |
| ATOM | 563 | CB  | ALA | A | 71 | 54.933 | 62.773 | 13.030 | 1.00 | 22.47 | C |
| ATOM | 564 | N   | LEU | A | 72 | 53.275 | 59.894 | 12.141 | 1.00 | 22.42 | N |
| ATOM | 565 | CA  | LEU | A | 72 | 52.677 | 58.672 | 12.694 | 1.00 | 22.25 | C |
| ATOM | 566 | C   | LEU | A | 72 | 53.703 | 57.628 | 13.099 | 1.00 | 22.08 | C |
| ATOM | 567 | O   | LEU | A | 72 | 53.313 | 56.578 | 13.604 | 1.00 | 21.68 | O |
| ATOM | 568 | CB  | LEU | A | 72 | 51.635 | 58.035 | 11.735 | 1.00 | 21.83 | C |

| ATOM | 569 | CG  | LEU | A | 72 | 52.171 | 57.508 | 10.399 | 1.00 | 22.30 | C |
| ATOM | 570 | CD1 | LEU | A | 72 | 51.799 | 56.000 | 10.254 | 1.00 | 22.27 | C |
| ATOM | 571 | CD2 | LEU | A | 72 | 51.576 | 58.328 | 9.252  | 1.00 | 22.56 | C |
| ATOM | 572 | N   | THR | A | 73 | 54.999 | 57.884 | 12.845 | 1.00 | 21.45 | N |
| ATOM | 573 | CA  | THR | A | 73 | 56.047 | 56.984 | 13.296 | 1.00 | 21.34 | C |
| ATOM | 574 | C   | THR | A | 73 | 57.183 | 57.838 | 13.882 | 1.00 | 21.65 | C |
| ATOM | 575 | O   | THR | A | 73 | 57.278 | 59.047 | 13.599 | 1.00 | 20.20 | O |
| ATOM | 576 | CB  | THR | A | 73 | 56.652 | 56.033 | 12.203 | 1.00 | 22.36 | C |
| ATOM | 577 | OG1 | THR | A | 73 | 57.686 | 56.715 | 11.452 | 1.00 | 22.79 | O |
| ATOM | 578 | CG2 | THR | A | 73 | 55.570 | 55.512 | 11.268 | 1.00 | 20.99 | C |
| ATOM | 579 | N   | GLY | A | 74 | 58.015 | 57.210 | 14.717 | 1.00 | 20.61 | N |
| ATOM | 580 | CA  | GLY | A | 74 | 59.123 | 57.932 | 15.332 | 1.00 | 21.31 | C |
| ATOM | 581 | C   | GLY | A | 74 | 60.094 | 58.506 | 14.287 | 1.00 | 21.58 | C |
| ATOM | 582 | O   | GLY | A | 74 | 60.497 | 59.680 | 14.367 | 1.00 | 21.28 | O |
| ATOM | 583 | N   | ASN | A | 75 | 60.478 | 57.690 | 13.305 | 1.00 | 21.58 | N |
| ATOM | 584 | CA  | ASN | A | 75 | 61.390 | 58.165 | 12.268 | 1.00 | 22.06 | C |
| ATOM | 585 | C   | ASN | A | 75 | 60.786 | 59.376 | 11.529 | 1.00 | 22.67 | C |
| ATOM | 586 | O   | ASN | A | 75 | 61.519 | 60.291 | 11.156 | 1.00 | 22.43 | O |
| ATOM | 587 | CB  | ASN | A | 75 | 61.675 | 57.061 | 11.245 | 1.00 | 21.81 | C |
| ATOM | 588 | CG  | ASN | A | 75 | 62.630 | 56.021 | 11.764 | 1.00 | 21.63 | C |
| ATOM | 589 | OD1 | ASN | A | 75 | 62.944 | 55.965 | 12.979 | 1.00 | 23.92 | O |
| ATOM | 590 | ND2 | ASN | A | 75 | 63.077 | 55.167 | 10.881 | 1.00 | 20.17 | N |
| ATOM | 591 | N   | MET | A | 76 | 59.472 | 59.378 | 11.310 | 1.00 | 22.62 | N |
| ATOM | 592 | CA  | MET | A | 76 | 58.831 | 60.497 | 10.614 | 1.00 | 23.52 | C |
| ATOM | 593 | C   | MET | A | 76 | 59.090 | 61.769 | 11.399 | 1.00 | 23.74 | C |
| ATOM | 594 | O   | MET | A | 76 | 59.359 | 62.814 | 10.796 | 1.00 | 23.88 | O |
| ATOM | 595 | CB  | MET | A | 76 | 57.303 | 60.371 | 10.540 | 1.00 | 24.30 | C |
| ATOM | 596 | CG  | MET | A | 76 | 56.811 | 59.588 | 9.406  | 1.00 | 25.58 | C |
| ATOM | 597 | SD  | MET | A | 76 | 55.060 | 59.904 | 9.105  | 1.00 | 24.97 | S |
| ATOM | 598 | CE  | MET | A | 76 | 54.905 | 58.515 | 7.926  | 1.00 | 25.22 | C |
| ATOM | 599 | N   | ALA | A | 77 | 58.955 | 61.688 | 12.725 | 1.00 | 22.97 | N |
| ATOM | 600 | CA  | ALA | A | 77 | 59.169 | 62.881 | 13.562 | 1.00 | 23.67 | C |
| ATOM | 601 | C   | ALA | A | 77 | 60.631 | 63.322 | 13.535 | 1.00 | 23.45 | C |
| ATOM | 602 | O   | ALA | A | 77 | 60.911 | 64.530 | 13.511 | 1.00 | 23.66 | O |
| ATOM | 603 | CB  | ALA | A | 77 | 58.741 | 62.633 | 14.980 | 1.00 | 22.89 | C |
| ATOM | 604 | N   | VAL | A | 78 | 61.540 | 62.348 | 13.577 | 1.00 | 22.87 | N |
| ATOM | 605 | CA  | VAL | A | 78 | 62.964 | 62.655 | 13.509 | 1.00 | 23.34 | C |
| ATOM | 606 | C   | VAL | A | 78 | 63.280 | 63.455 | 12.222 | 1.00 | 23.67 | C |
| ATOM | 607 | O   | VAL | A | 78 | 64.018 | 64.474 | 12.281 | 1.00 | 22.88 | O |
| ATOM | 608 | CB  | VAL | A | 78 | 63.829 | 61.378 | 13.495 | 1.00 | 23.16 | C |
| ATOM | 609 | CG1 | VAL | A | 78 | 65.313 | 61.734 | 13.108 | 1.00 | 23.47 | C |
| ATOM | 610 | CG2 | VAL | A | 78 | 63.804 | 60.703 | 14.873 | 1.00 | 23.53 | C |
| ATOM | 611 | N   | GLN | A | 79 | 62.748 | 63.010 | 11.073 | 1.00 | 23.04 | N |
| ATOM | 612 | CA  | GLN | A | 79 | 63.025 | 63.721 | 9.825  | 1.00 | 23.92 | C |
| ATOM | 613 | C   | GLN | A | 79 | 62.406 | 65.115 | 9.827  | 1.00 | 25.01 | C |
| ATOM | 614 | O   | GLN | A | 79 | 62.984 | 66.066 | 9.242  | 1.00 | 25.31 | O |
| ATOM | 615 | CB  | GLN | A | 79 | 62.555 | 62.924 | 8.593  | 1.00 | 24.11 | C |
| ATOM | 616 | CG  | GLN | A | 79 | 63.276 | 61.576 | 8.402  | 1.00 | 24.75 | C |
| ATOM | 617 | CD  | GLN | A | 79 | 64.776 | 61.733 | 8.333  | 1.00 | 25.89 | C |
| ATOM | 618 | OE1 | GLN | A | 79 | 65.271 | 62.798 | 7.949  | 1.00 | 26.35 | O |
| ATOM | 619 | NE2 | GLN | A | 79 | 65.518 | 60.670 | 8.659  | 1.00 | 25.50 | N |
| ATOM | 620 | N   | GLN | A | 80 | 61.258 | 65.274 | 10.494 | 1.00 | 24.97 | N |
| ATOM | 621 | CA  | GLN | A | 80 | 60.636 | 66.581 | 10.566 | 1.00 | 25.32 | C |
| ATOM | 622 | C   | GLN | A | 80 | 61.555 | 67.560 | 11.299 | 1.00 | 26.04 | C |
| ATOM | 623 | O   | GLN | A | 80 | 61.739 | 68.706 | 10.864 | 1.00 | 26.02 | O |
| ATOM | 624 | CB  | GLN | A | 80 | 59.266 | 66.498 | 11.246 | 1.00 | 24.66 | C |
| ATOM | 625 | CG  | GLN | A | 80 | 58.226 | 65.781 | 10.339 | 1.00 | 23.39 | C |
| ATOM | 626 | CD  | GLN | A | 80 | 56.888 | 65.529 | 11.058 | 1.00 | 24.47 | C |
| ATOM | 627 | OE1 | GLN | A | 80 | 56.733 | 65.846 | 12.252 | 1.00 | 25.18 | O |
| ATOM | 628 | NE2 | GLN | A | 80 | 55.926 | 64.968 | 10.336 | 1.00 | 22.83 | N |
| ATOM | 629 | N   | VAL | A | 81 | 62.156 | 67.108 | 12.384 | 1.00 | 26.17 | N |
| ATOM | 630 | CA  | VAL | A | 81 | 63.046 | 67.962 | 13.162 | 1.00 | 26.86 | C |
| ATOM | 631 | C   | VAL | A | 81 | 64.361 | 68.170 | 12.394 | 1.00 | 28.03 | C |
| ATOM | 632 | O   | VAL | A | 81 | 64.868 | 69.289 | 12.307 | 1.00 | 28.07 | O |
| ATOM | 633 | CB  | VAL | A | 81 | 63.305 | 67.339 | 14.555 | 1.00 | 26.32 | C |
| ATOM | 634 | CG1 | VAL | A | 81 | 64.359 | 68.134 | 15.328 | 1.00 | 27.82 | C |
| ATOM | 635 | CG2 | VAL | A | 81 | 62.000 | 67.354 | 15.343 | 1.00 | 25.31 | C |
| ATOM | 636 | N   | ARG | A | 82 | 64.892 | 67.105 | 11.815 | 1.00 | 27.89 | N |
| ATOM | 637 | CA  | ARG | A | 82 | 66.127 | 67.213 | 11.051 | 1.00 | 28.90 | C |
| ATOM | 638 | C   | ARG | A | 82 | 65.960 | 68.210 | 9.888  | 1.00 | 29.16 | C |
| ATOM | 639 | O   | ARG | A | 82 | 66.907 | 68.909 | 9.517  | 1.00 | 28.82 | O |
| ATOM | 640 | CB  | ARG | A | 82 | 66.542 | 65.827 | 10.544 | 1.00 | 29.76 | C |
| ATOM | 641 | CG  | ARG | A | 82 | 67.605 | 65.823 | 9.463  | 1.00 | 32.78 | C |
| ATOM | 642 | CD  | ARG | A | 82 | 68.834 | 66.500 | 9.933  | 1.00 | 34.59 | C |
| ATOM | 643 | NE  | ARG | A | 82 | 69.651 | 65.593 | 10.703 | 1.00 | 36.91 | N |
| ATOM | 644 | CZ  | ARG | A | 82 | 70.702 | 65.987 | 11.419 | 1.00 | 37.89 | C |
| ATOM | 645 | NH1 | ARG | A | 82 | 71.044 | 67.263 | 11.460 | 1.00 | 39.07 | N |
| ATOM | 646 | NH2 | ARG | A | 82 | 71.419 | 65.107 | 12.074 | 1.00 | 37.91 | N |
| ATOM | 647 | N   | ALA | A | 83 | 64.746 | 68.289 | 9.352  | 1.00 | 28.54 | N |
| ATOM | 648 | CA  | ALA | A | 83 | 64.419 | 69.160 | 8.237  | 1.00 | 28.90 | C |

| ATOM | 649 | C | ALA | A | 83 | 64.179 | 70.595 | 8.696 | 1.00 | 29.38 | C |
| ATOM | 650 | O | ALA | A | 83 | 63.959 | 71.474 | 7.867 | 1.00 | 29.70 | O |
| ATOM | 651 | CB | ALA | A | 83 | 63.183 | 68.643 | 7.517 | 1.00 | 28.54 | C |
| ATOM | 652 | N | GLY | A | 84 | 64.174 | 70.815 | 10.009 | 1.00 | 29.48 | N |
| ATOM | 653 | CA | GLY | A | 84 | 63.972 | 72.157 | 10.519 | 1.00 | 30.25 | C |
| ATOM | 654 | C | GLY | A | 84 | 62.651 | 72.510 | 11.182 | 1.00 | 30.76 | C |
| ATOM | 655 | O | GLY | A | 84 | 62.497 | 73.665 | 11.621 | 1.00 | 30.71 | O |
| ATOM | 656 | N | LEU | A | 85 | 61.697 | 71.570 | 11.283 | 1.00 | 29.81 | N |
| ATOM | 657 | CA | LEU | A | 85 | 60.440 | 71.924 | 11.930 | 1.00 | 28.98 | C |
| ATOM | 658 | C | LEU | A | 85 | 60.633 | 71.984 | 13.431 | 1.00 | 28.78 | C |
| ATOM | 659 | O | LEU | A | 85 | 61.505 | 71.324 | 13.987 | 1.00 | 29.15 | O |
| ATOM | 660 | CB | LEU | A | 85 | 59.312 | 70.969 | 11.534 | 1.00 | 28.82 | C |
| ATOM | 661 | CG | LEU | A | 85 | 59.016 | 71.025 | 10.029 | 1.00 | 28.67 | C |
| ATOM | 662 | CD1 | LEU | A | 85 | 57.828 | 70.110 | 9.741 | 1.00 | 27.73 | C |
| ATOM | 663 | CD2 | LEU | A | 85 | 58.730 | 72.512 | 9.569 | 1.00 | 28.37 | C |
| ATOM | 664 | N | LYS | A | 86 | 59.813 | 72.791 | 14.088 | 1.00 | 28.97 | N |
| ATOM | 665 | CA | LYS | A | 86 | 59.975 | 73.047 | 15.507 | 1.00 | 29.73 | C |
| ATOM | 666 | C | LYS | A | 86 | 58.937 | 72.445 | 16.418 | 1.00 | 29.15 | C |
| ATOM | 667 | O | LYS | A | 86 | 58.971 | 72.677 | 17.624 | 1.00 | 29.91 | O |
| ATOM | 668 | CB | LYS | A | 86 | 59.989 | 74.558 | 15.737 | 1.00 | 31.91 | C |
| ATOM | 669 | CG | LYS | A | 86 | 61.071 | 75.330 | 14.957 | 1.00 | 36.03 | C |
| ATOM | 670 | CD | LYS | A | 86 | 62.485 | 74.832 | 15.298 | 1.00 | 38.66 | C |
| ATOM | 671 | CE | LYS | A | 86 | 63.563 | 75.798 | 14.759 | 1.00 | 40.88 | C |
| ATOM | 672 | NZ | LYS | A | 86 | 63.420 | 77.124 | 15.463 | 1.00 | 43.09 | N |
| ATOM | 673 | N | ALA | A | 87 | 57.982 | 71.726 | 15.841 | 1.00 | 27.60 | N |
| ATOM | 674 | CA | ALA | A | 87 | 56.946 | 71.075 | 16.636 | 1.00 | 26.59 | C |
| ATOM | 675 | C | ALA | A | 87 | 56.506 | 69.884 | 15.792 | 1.00 | 26.00 | C |
| ATOM | 676 | O | ALA | A | 87 | 56.755 | 69.859 | 14.600 | 1.00 | 24.99 | O |
| ATOM | 677 | CB | ALA | A | 87 | 55.772 | 72.014 | 16.874 | 1.00 | 25.40 | C |
| ATOM | 678 | N | ILE | A | 88 | 55.872 | 68.907 | 16.432 | 1.00 | 25.29 | N |
| ATOM | 679 | CA | ILE | A | 88 | 55.376 | 67.718 | 15.758 | 1.00 | 24.79 | C |
| ATOM | 680 | C | ILE | A | 88 | 53.881 | 67.660 | 15.998 | 1.00 | 24.68 | C |
| ATOM | 681 | O | ILE | A | 88 | 53.428 | 67.948 | 17.103 | 1.00 | 24.67 | O |
| ATOM | 682 | CB | ILE | A | 88 | 56.040 | 66.451 | 16.357 | 1.00 | 25.70 | C |
| ATOM | 683 | CG1 | ILE | A | 88 | 57.552 | 66.511 | 16.047 | 1.00 | 26.32 | C |
| ATOM | 684 | CG2 | ILE | A | 88 | 55.440 | 65.164 | 15.696 | 1.00 | 24.21 | C |
| ATOM | 685 | CD1 | ILE | A | 88 | 58.336 | 66.106 | 17.182 | 1.00 | 28.92 | C |
| ATOM | 686 | N | TYR | A | 89 | 53.116 | 67.332 | 14.960 | 1.00 | 23.53 | N |
| ATOM | 687 | CA | TYR | A | 89 | 51.677 | 67.209 | 15.117 | 1.00 | 23.73 | C |
| ATOM | 688 | C | TYR | A | 89 | 51.367 | 65.713 | 15.061 | 1.00 | 23.06 | C |
| ATOM | 689 | O | TYR | A | 89 | 51.833 | 64.988 | 14.178 | 1.00 | 23.77 | O |
| ATOM | 690 | CB | TYR | A | 89 | 50.920 | 67.924 | 14.016 | 1.00 | 22.76 | C |
| ATOM | 691 | CG | TYR | A | 89 | 49.446 | 67.668 | 14.152 | 1.00 | 23.19 | C |
| ATOM | 692 | CD1 | TYR | A | 89 | 48.740 | 68.177 | 15.232 | 1.00 | 22.42 | C |
| ATOM | 693 | CD2 | TYR | A | 89 | 48.767 | 66.838 | 13.234 | 1.00 | 22.63 | C |
| ATOM | 694 | CE1 | TYR | A | 89 | 47.386 | 67.878 | 15.413 | 1.00 | 23.60 | C |
| ATOM | 695 | CE2 | TYR | A | 89 | 47.410 | 66.523 | 13.410 | 1.00 | 23.56 | C |
| ATOM | 696 | CZ | TYR | A | 89 | 46.729 | 67.041 | 14.498 | 1.00 | 23.06 | C |
| ATOM | 697 | OH | TYR | A | 89 | 45.412 | 66.705 | 14.718 | 1.00 | 23.38 | O |
| ATOM | 698 | N | LEU | A | 90 | 50.599 | 65.241 | 16.013 | 1.00 | 23.47 | N |
| ATOM | 699 | CA | LEU | A | 90 | 50.311 | 63.813 | 16.053 | 1.00 | 23.28 | C |
| ATOM | 700 | C | LEU | A | 90 | 48.836 | 63.659 | 15.818 | 1.00 | 23.06 | C |
| ATOM | 701 | O | LEU | A | 90 | 47.996 | 63.911 | 16.689 | 1.00 | 23.52 | O |
| ATOM | 702 | CB | LEU | A | 90 | 50.798 | 63.256 | 17.401 | 1.00 | 23.88 | C |
| ATOM | 703 | CG | LEU | A | 90 | 50.414 | 61.881 | 17.948 | 1.00 | 26.11 | C |
| ATOM | 704 | CD1 | LEU | A | 90 | 49.943 | 60.967 | 16.883 | 1.00 | 24.78 | C |
| ATOM | 705 | CD2 | LEU | A | 90 | 51.521 | 61.339 | 18.819 | 1.00 | 24.26 | C |
| ATOM | 706 | N | SER | A | 91 | 48.548 | 63.271 | 14.590 | 1.00 | 22.67 | N |
| ATOM | 707 | CA | SER | A | 91 | 47.213 | 63.106 | 14.088 | 1.00 | 22.17 | C |
| ATOM | 708 | C | SER | A | 91 | 46.499 | 61.844 | 14.569 | 1.00 | 21.90 | C |
| ATOM | 709 | O | SER | A | 91 | 47.055 | 60.747 | 14.486 | 1.00 | 21.90 | O |
| ATOM | 710 | CB | SER | A | 91 | 47.292 | 63.096 | 12.552 | 1.00 | 22.79 | C |
| ATOM | 711 | OG | SER | A | 91 | 46.057 | 62.718 | 11.952 | 1.00 | 22.25 | O |
| ATOM | 712 | N | GLY | A | 92 | 45.277 | 62.000 | 15.052 | 1.00 | 20.59 | N |
| ATOM | 713 | CA | GLY | A | 92 | 44.516 | 60.849 | 15.488 | 1.00 | 21.13 | C |
| ATOM | 714 | C | GLY | A | 92 | 43.995 | 60.095 | 14.246 | 1.00 | 21.89 | C |
| ATOM | 715 | O | GLY | A | 92 | 43.862 | 58.872 | 14.277 | 1.00 | 22.90 | O |
| ATOM | 716 | N | TRP | A | 93 | 43.700 | 60.826 | 13.173 | 1.00 | 20.98 | N |
| ATOM | 717 | CA | TRP | A | 93 | 43.210 | 60.255 | 11.909 | 1.00 | 22.03 | C |
| ATOM | 718 | C | TRP | A | 93 | 44.295 | 59.304 | 11.383 | 1.00 | 21.91 | C |
| ATOM | 719 | O | TRP | A | 93 | 43.987 | 58.165 | 11.008 | 1.00 | 22.33 | O |
| ATOM | 720 | CB | TRP | A | 93 | 42.959 | 61.410 | 10.911 | 1.00 | 21.99 | C |
| ATOM | 721 | CG | TRP | A | 93 | 42.270 | 61.029 | 9.611 | 1.00 | 22.59 | C |
| ATOM | 722 | CD1 | TRP | A | 93 | 41.001 | 61.374 | 9.220 | 1.00 | 22.45 | C |
| ATOM | 723 | CD2 | TRP | A | 93 | 42.829 | 60.255 | 8.537 | 1.00 | 22.21 | C |
| ATOM | 724 | NE1 | TRP | A | 93 | 40.739 | 60.857 | 7.967 | 1.00 | 22.73 | N |
| ATOM | 725 | CE2 | TRP | A | 93 | 41.843 | 60.166 | 7.530 | 1.00 | 22.60 | C |
| ATOM | 726 | CE3 | TRP | A | 93 | 44.075 | 59.629 | 8.328 | 1.00 | 22.85 | C |
| ATOM | 727 | CZ2 | TRP | A | 93 | 42.055 | 59.469 | 6.328 | 1.00 | 22.48 | C |
| ATOM | 728 | CZ3 | TRP | A | 93 | 44.288 | 58.929 | 7.116 | 1.00 | 23.13 | C |

| ATOM | 729 | CH2 | TRP | A | 93 | 43.274 | 58.858 | 6.142 | 1.00 | 22.76 | C |
|------|-----|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 730 | N | GLN | A | 94 | 45.561 | 59.743 | 11.386 | 1.00 | 21.43 | N |
| ATOM | 731 | CA | GLN | A | 94 | 46.647 | 58.871 | 10.914 | 1.00 | 22.04 | C |
| ATOM | 732 | C | GLN | A | 94 | 46.783 | 57.654 | 11.821 | 1.00 | 21.62 | C |
| ATOM | 733 | O | GLN | A | 94 | 47.114 | 56.560 | 11.357 | 1.00 | 22.51 | O |
| ATOM | 734 | CB | GLN | A | 94 | 48.001 | 59.621 | 10.871 | 1.00 | 21.92 | C |
| ATOM | 735 | CG | GLN | A | 94 | 47.974 | 60.825 | 9.920 | 1.00 | 23.35 | C |
| ATOM | 736 | CD | GLN | A | 94 | 49.366 | 61.451 | 9.687 | 1.00 | 23.69 | C |
| ATOM | 737 | OE1 | GLN | A | 94 | 50.206 | 61.575 | 10.624 | 1.00 | 24.59 | O |
| ATOM | 738 | NE2 | GLN | A | 94 | 49.604 | 61.863 | 8.460 | 1.00 | 21.50 | N |
| ATOM | 739 | N | VAL | A | 95 | 46.618 | 57.864 | 13.124 | 1.00 | 21.38 | N |
| ATOM | 740 | CA | VAL | A | 95 | 46.706 | 56.754 | 14.090 | 1.00 | 20.59 | C |
| ATOM | 741 | C | VAL | A | 95 | 45.579 | 55.746 | 13.782 | 1.00 | 20.72 | C |
| ATOM | 742 | O | VAL | A | 95 | 45.802 | 54.543 | 13.746 | 1.00 | 20.99 | O |
| ATOM | 743 | CB | VAL | A | 95 | 46.632 | 57.314 | 15.529 | 1.00 | 20.07 | C |
| ATOM | 744 | CG1 | VAL | A | 95 | 46.183 | 56.218 | 16.536 | 1.00 | 19.79 | C |
| ATOM | 745 | CG2 | VAL | A | 95 | 48.069 | 57.838 | 15.932 | 1.00 | 19.49 | C |
| ATOM | 746 | N | ALA | A | 96 | 44.366 | 56.242 | 13.543 | 1.00 | 20.79 | N |
| ATOM | 747 | CA | ALA | A | 96 | 43.251 | 55.380 | 13.177 | 1.00 | 20.73 | C |
| ATOM | 748 | C | ALA | A | 96 | 43.585 | 54.590 | 11.878 | 1.00 | 21.73 | C |
| ATOM | 749 | O | ALA | A | 96 | 43.328 | 53.363 | 11.769 | 1.00 | 21.44 | O |
| ATOM | 750 | CB | ALA | A | 96 | 42.007 | 56.242 | 12.932 | 1.00 | 21.67 | C |
| ATOM | 751 | N | GLY | A | 97 | 44.179 | 55.262 | 10.883 | 1.00 | 21.84 | N |
| ATOM | 752 | CA | GLY | A | 97 | 44.433 | 54.538 | 9.638 | 1.00 | 21.66 | C |
| ATOM | 753 | C | GLY | A | 97 | 45.672 | 53.656 | 9.569 | 1.00 | 22.05 | C |
| ATOM | 754 | O | GLY | A | 97 | 45.739 | 52.738 | 8.733 | 1.00 | 22.41 | O |
| ATOM | 755 | N | ASP | A | 98 | 46.647 | 53.866 | 10.449 | 1.00 | 21.67 | N |
| ATOM | 756 | CA | ASP | A | 98 | 47.875 | 53.089 | 10.279 | 1.00 | 21.90 | C |
| ATOM | 757 | C | ASP | A | 98 | 48.766 | 52.978 | 11.512 | 1.00 | 21.56 | C |
| ATOM | 758 | O | ASP | A | 98 | 49.880 | 52.510 | 11.397 | 1.00 | 22.07 | O |
| ATOM | 759 | CB | ASP | A | 98 | 48.678 | 53.730 | 9.092 | 1.00 | 21.81 | C |
| ATOM | 760 | CG | ASP | A | 98 | 49.685 | 52.755 | 8.409 | 1.00 | 23.80 | C |
| ATOM | 761 | OD1 | ASP | A | 98 | 49.472 | 51.517 | 8.395 | 1.00 | 22.88 | O |
| ATOM | 762 | OD2 | ASP | A | 98 | 50.700 | 53.256 | 7.843 | 1.00 | 23.26 | O |
| ATOM | 763 | N | ALA | A | 99 | 48.300 | 53.382 | 11.921 | 1.00 | 21.20 | N |
| ATOM | 764 | CA | ALA | A | 99 | 49.162 | 53.249 | 13.866 | 1.00 | 22.02 | C |
| ATOM | 765 | C | ALA | A | 99 | 48.415 | 53.182 | 15.200 | 1.00 | 22.12 | C |
| ATOM | 766 | O | ALA | A | 99 | 48.741 | 53.938 | 16.116 | 1.00 | 21.71 | O |
| ATOM | 767 | CB | ALA | A | 99 | 50.202 | 54.422 | 13.905 | 1.00 | 21.81 | C |
| ATOM | 768 | N | ASN | A | 100 | 47.426 | 52.292 | 15.329 | 1.00 | 21.57 | N |
| ATOM | 769 | CA | ASN | A | 100 | 46.697 | 52.235 | 16.602 | 1.00 | 20.83 | C |
| ATOM | 770 | C | ASN | A | 100 | 46.792 | 50.845 | 17.205 | 1.00 | 21.50 | C |
| ATOM | 771 | O | ASN | A | 100 | 47.078 | 49.859 | 16.508 | 1.00 | 21.72 | O |
| ATOM | 772 | CB | ASN | A | 100 | 45.242 | 52.658 | 16.441 | 1.00 | 20.24 | C |
| ATOM | 773 | CG | ASN | A | 100 | 44.452 | 51.701 | 15.571 | 1.00 | 21.85 | C |
| ATOM | 774 | OD1 | ASN | A | 100 | 44.283 | 51.917 | 14.338 | 1.00 | 23.67 | O |
| ATOM | 775 | ND2 | ASN | A | 100 | 43.967 | 50.647 | 16.183 | 1.00 | 18.88 | N |
| ATOM | 776 | N | LEU | A | 101 | 46.467 | 50.754 | 18.481 | 1.00 | 20.12 | N |
| ATOM | 777 | CA | LEU | A | 101 | 46.674 | 49.515 | 19.210 | 1.00 | 20.66 | C |
| ATOM | 778 | C | LEU | A | 101 | 45.761 | 48.322 | 18.903 | 1.00 | 21.10 | C |
| ATOM | 779 | O | LEU | A | 101 | 45.986 | 47.241 | 19.427 | 1.00 | 20.73 | O |
| ATOM | 780 | CB | LEU | A | 101 | 46.683 | 49.854 | 20.694 | 1.00 | 21.13 | C |
| ATOM | 781 | CG | LEU | A | 101 | 47.797 | 50.855 | 21.095 | 1.00 | 22.01 | C |
| ATOM | 782 | CD1 | LEU | A | 101 | 47.561 | 51.240 | 22.580 | 1.00 | 21.77 | C |
| ATOM | 783 | CD2 | LEU | A | 101 | 49.225 | 50.185 | 20.955 | 1.00 | 22.50 | C |
| ATOM | 784 | N | SER | A | 102 | 44.738 | 48.510 | 18.061 | 1.00 | 20.64 | N |
| ATOM | 785 | CA | SER | A | 102 | 43.875 | 47.380 | 17.687 | 1.00 | 21.21 | C |
| ATOM | 786 | C | SER | A | 102 | 44.554 | 46.576 | 16.567 | 1.00 | 20.73 | C |
| ATOM | 787 | O | SER | A | 102 | 44.223 | 45.415 | 16.340 | 1.00 | 20.00 | O |
| ATOM | 788 | CB | SER | A | 102 | 42.528 | 47.865 | 17.140 | 1.00 | 20.07 | C |
| ATOM | 789 | OG | SER | A | 102 | 42.669 | 48.399 | 15.814 | 1.00 | 20.13 | O |
| ATOM | 790 | N | GLY | A | 103 | 45.458 | 47.231 | 15.840 | 1.00 | 20.46 | N |
| ATOM | 791 | CA | GLY | A | 103 | 46.141 | 46.598 | 14.717 | 1.00 | 20.76 | C |
| ATOM | 792 | C | GLY | A | 103 | 45.356 | 46.754 | 13.405 | 1.00 | 20.90 | C |
| ATOM | 793 | O | GLY | A | 103 | 45.813 | 46.351 | 12.318 | 1.00 | 20.67 | O |
| ATOM | 794 | N | HIS | A | 104 | 44.173 | 47.354 | 13.496 | 1.00 | 20.40 | N |
| ATOM | 795 | CA | HIS | A | 104 | 43.325 | 47.550 | 12.329 | 1.00 | 20.78 | C |
| ATOM | 796 | C | HIS | A | 104 | 43.420 | 48.916 | 11.673 | 1.00 | 20.91 | C |
| ATOM | 797 | O | HIS | A | 104 | 43.880 | 49.882 | 12.277 | 1.00 | 20.43 | O |
| ATOM | 798 | CB | HIS | A | 104 | 41.854 | 47.287 | 12.708 | 1.00 | 20.56 | C |
| ATOM | 799 | CG | HIS | A | 104 | 41.566 | 45.843 | 12.971 | 1.00 | 21.84 | C |
| ATOM | 800 | ND1 | HIS | A | 104 | 41.641 | 44.881 | 11.979 | 1.00 | 22.70 | N |
| ATOM | 801 | CD2 | HIS | A | 104 | 41.249 | 45.188 | 14.117 | 1.00 | 21.61 | C |
| ATOM | 802 | CE1 | HIS | A | 104 | 41.383 | 43.692 | 12.509 | 1.00 | 23.16 | C |
| ATOM | 803 | NE2 | HIS | A | 104 | 41.141 | 43.852 | 13.803 | 1.00 | 23.00 | N |
| ATOM | 804 | N | THR | A | 105 | 42.955 | 48.981 | 10.437 | 1.00 | 20.69 | N |
| ATOM | 805 | CA | THR | A | 105 | 42.888 | 50.230 | 9.676 | 1.00 | 20.85 | C |
| ATOM | 806 | C | THR | A | 105 | 41.483 | 50.785 | 9.882 | 1.00 | 21.57 | C |
| ATOM | 807 | O | THR | A | 105 | 40.505 | 50.111 | 9.567 | 1.00 | 22.19 | O |
| ATOM | 808 | CB | THR | A | 105 | 43.075 | 49.958 | 8.160 | 1.00 | 21.37 | C |

| ATOM | 809 | OG1 | THR A 105 | 44.393 | 49.422 | 7.936 | 1.00 20.54 | O |
|------|-----|-----|-----------|--------|--------|-------|-------|---|
| ATOM | 810 | CG2 | THR A 105 | 42.882 | 51.236 | 7.342 | 1.00 20.77 | C |
| ATOM | 811 | N | TYR A 106 | 41.371 | 52.019 | 10.368 | 1.00 21.38 | N |
| ATOM | 812 | CA | TYR A 106 | 40.072 | 52.610 | 10.593 | 1.00 21.66 | C |
| ATOM | 813 | C | TYR A 106 | 39.910 | 54.022 | 10.048 | 1.00 22.02 | C |
| ATOM | 814 | O | TYR A 106 | 40.887 | 54.756 | 9.867 | 1.00 21.81 | O |
| ATOM | 815 | CB | TYR A 106 | 39.799 | 52.772 | 12.091 | 1.00 21.41 | C |
| ATOM | 816 | CG | TYR A 106 | 39.669 | 51.505 | 12.908 | 1.00 22.21 | C |
| ATOM | 817 | CD1 | TYR A 106 | 38.755 | 50.497 | 12.538 | 1.00 21.89 | C |
| ATOM | 818 | CD2 | TYR A 106 | 40.388 | 51.343 | 14.099 | 1.00 21.23 | C |
| ATOM | 819 | CE1 | TYR A 106 | 38.561 | 49.365 | 13.347 | 1.00 21.83 | C |
| ATOM | 820 | CE2 | TYR A 106 | 40.189 | 50.210 | 14.921 | 1.00 21.46 | C |
| ATOM | 821 | CZ | TYR A 106 | 39.275 | 49.231 | 14.542 | 1.00 22.19 | C |
| ATOM | 822 | OH | TYR A 106 | 39.041 | 48.139 | 15.382 | 1.00 21.32 | O |
| ATOM | 823 | N | PRO A 107 | 38.648 | 54.418 | 9.807 | 1.00 22.06 | N |
| ATOM | 824 | CA | PRO A 107 | 38.357 | 55.766 | 9.338 | 1.00 21.64 | C |
| ATOM | 825 | C | PRO A 107 | 38.319 | 56.561 | 10.657 | 1.00 21.98 | C |
| ATOM | 826 | O | PRO A 107 | 38.448 | 55.987 | 11.770 | 1.00 21.37 | O |
| ATOM | 827 | CB | PRO A 107 | 36.980 | 55.648 | 8.674 | 1.00 21.41 | C |
| ATOM | 828 | CG | PRO A 107 | 36.310 | 54.483 | 9.458 | 1.00 21.54 | C |
| ATOM | 829 | CD | PRO A 107 | 37.490 | 53.511 | 9.632 | 1.00 22.27 | C |
| ATOM | 830 | N | ASP A 108 | 38.093 | 57.859 | 10.550 | 1.00 22.48 | N |
| ATOM | 831 | CA | ASP A 108 | 38.120 | 58.759 | 11.701 | 1.00 23.47 | C |
| ATOM | 832 | C | ASP A 108 | 36.793 | 58.885 | 12.461 | 1.00 23.69 | C |
| ATOM | 833 | O | ASP A 108 | 36.040 | 59.821 | 12.228 | 1.00 23.20 | O |
| ATOM | 834 | CB | ASP A 108 | 38.615 | 60.125 | 11.182 | 1.00 24.36 | C |
| ATOM | 835 | CG | ASP A 108 | 38.728 | 61.209 | 12.281 | 1.00 26.56 | C |
| ATOM | 836 | OD1 | ASP A 108 | 38.697 | 60.882 | 13.508 | 1.00 26.67 | O |
| ATOM | 837 | OD2 | ASP A 108 | 38.872 | 62.392 | 11.881 | 1.00 25.19 | O |
| ATOM | 838 | N | GLN A 109 | 36.528 | 57.952 | 13.377 | 1.00 23.47 | N |
| ATOM | 839 | CA | GLN A 109 | 35.292 | 57.967 | 14.177 | 1.00 24.81 | C |
| ATOM | 840 | C | GLN A 109 | 35.522 | 57.433 | 15.581 | 1.00 23.73 | C |
| ATOM | 841 | O | GLN A 109 | 34.667 | 56.733 | 16.129 | 1.00 23.67 | O |
| ATOM | 842 | CB | GLN A 109 | 34.186 | 57.122 | 13.524 | 1.00 26.51 | C |
| ATOM | 843 | CG | GLN A 109 | 33.329 | 57.866 | 12.519 | 1.00 30.16 | C |
| ATOM | 844 | CD | GLN A 109 | 32.020 | 57.101 | 12.131 | 1.00 29.77 | C |
| ATOM | 845 | OE1 | GLN A 109 | 30.983 | 57.168 | 12.831 | 1.00 32.06 | O |
| ATOM | 846 | NE2 | GLN A 109 | 32.085 | 56.383 | 11.040 | 1.00 28.63 | N |
| ATOM | 847 | N | SER A 110 | 36.663 | 57.794 | 16.174 | 1.00 22.90 | N |
| ATOM | 848 | CA | SER A 110 | 37.019 | 57.336 | 17.518 | 1.00 23.41 | C |
| ATOM | 849 | C | SER A 110 | 36.776 | 55.831 | 17.685 | 1.00 23.56 | C |
| ATOM | 850 | O | SER A 110 | 36.153 | 55.392 | 18.664 | 1.00 23.80 | O |
| ATOM | 851 | CB | SER A 110 | 36.234 | 58.119 | 18.599 | 1.00 22.88 | C |
| ATOM | 852 | OG | SER A 110 | 36.551 | 59.488 | 18.556 | 1.00 23.55 | O |
| ATOM | 853 | N | LEU A 111 | 37.317 | 55.058 | 16.742 | 1.00 22.86 | N |
| ATOM | 854 | CA | LEU A 111 | 37.184 | 53.615 | 16.722 | 1.00 22.61 | C |
| ATOM | 855 | C | LEU A 111 | 38.320 | 52.862 | 17.390 | 1.00 22.41 | C |
| ATOM | 856 | O | LEU A 111 | 38.115 | 51.742 | 17.873 | 1.00 21.15 | O |
| ATOM | 857 | CB | LEU A 111 | 37.096 | 53.124 | 15.286 | 1.00 23.35 | C |
| ATOM | 858 | CG | LEU A 111 | 35.737 | 53.308 | 14.623 | 1.00 25.76 | C |
| ATOM | 859 | CD1 | LEU A 111 | 35.871 | 53.114 | 13.097 | 1.00 25.38 | C |
| ATOM | 860 | CD2 | LEU A 111 | 34.732 | 52.356 | 15.266 | 1.00 25.14 | C |
| ATOM | 861 | N | TYR A 112 | 39.515 | 53.464 | 17.402 | 1.00 21.40 | N |
| ATOM | 862 | CA | TYR A 112 | 40.684 | 52.790 | 17.961 | 1.00 21.04 | C |
| ATOM | 863 | C | TYR A 112 | 40.710 | 52.871 | 19.483 | 1.00 20.38 | C |
| ATOM | 864 | O | TYR A 112 | 39.986 | 53.668 | 20.076 | 1.00 21.81 | O |
| ATOM | 865 | CB | TYR A 112 | 41.977 | 53.353 | 17.311 | 1.00 20.00 | C |
| ATOM | 866 | CG | TYR A 112 | 42.133 | 54.854 | 17.471 | 1.00 20.63 | C |
| ATOM | 867 | CD1 | TYR A 112 | 42.674 | 55.394 | 18.641 | 1.00 19.65 | C |
| ATOM | 868 | CD2 | TYR A 112 | 41.751 | 55.731 | 16.446 | 1.00 20.80 | C |
| ATOM | 869 | CE1 | TYR A 112 | 42.845 | 56.776 | 18.790 | 1.00 20.67 | C |
| ATOM | 870 | CE2 | TYR A 112 | 41.910 | 57.125 | 16.576 | 1.00 21.00 | C |
| ATOM | 871 | CZ | TYR A 112 | 42.460 | 57.637 | 17.762 | 1.00 20.41 | C |
| ATOM | 872 | OH | TYR A 112 | 42.592 | 58.995 | 17.924 | 1.00 19.82 | O |
| ATOM | 873 | N | PRO A 113 | 41.518 | 52.025 | 20.135 | 1.00 19.52 | N |
| ATOM | 874 | CA | PRO A 113 | 41.659 | 51.971 | 21.603 | 1.00 19.48 | C |
| ATOM | 875 | C | PRO A 113 | 42.163 | 53.360 | 22.102 | 1.00 20.36 | C |
| ATOM | 876 | O | PRO A 113 | 43.091 | 53.914 | 21.516 | 1.00 19.51 | O |
| ATOM | 877 | CB | PRO A 113 | 42.685 | 50.866 | 21.813 | 1.00 18.06 | C |
| ATOM | 878 | CG | PRO A 113 | 42.383 | 49.917 | 20.643 | 1.00 18.28 | C |
| ATOM | 879 | CD | PRO A 113 | 42.274 | 50.934 | 19.491 | 1.00 18.66 | C |
| ATOM | 880 | N | ALA A 114 | 41.535 | 53.873 | 23.163 | 1.00 19.55 | N |
| ATOM | 881 | CA | ALA A 114 | 41.803 | 55.214 | 23.701 | 1.00 20.11 | C |
| ATOM | 882 | C | ALA A 114 | 43.256 | 55.514 | 24.100 | 1.00 20.42 | C |
| ATOM | 883 | O | ALA A 114 | 43.645 | 56.701 | 24.178 | 1.00 21.34 | O |
| ATOM | 884 | CB | ALA A 114 | 40.847 | 55.470 | 24.885 | 1.00 18.56 | C |
| ATOM | 885 | N | ASN A 115 | 44.063 | 54.480 | 24.358 | 1.00 20.04 | N |
| ATOM | 886 | CA | ASN A 115 | 45.462 | 54.743 | 24.710 | 1.00 19.94 | C |
| ATOM | 887 | C | ASN A 115 | 46.390 | 54.726 | 23.483 | 1.00 20.30 | C |
| ATOM | 888 | O | ASN A 115 | 47.619 | 54.814 | 23.613 | 1.00 19.66 | O |

| ATOM | 889 | CB | ASN A 115 | 45.977 | 53.790 | 25.802 | 1.00 | 19.97 | C |
|------|-----|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 890 | CG | ASN A 115 | 45.840 | 52.312 | 25.443 | 1.00 | 21.07 | C |
| ATOM | 891 | OD1 | ASN A 115 | 44.982 | 51.914 | 24.656 | 1.00 | 19.63 | O |
| ATOM | 892 | ND2 | ASN A 115 | 46.691 | 51.490 | 26.050 | 1.00 | 20.24 | N |
| ATOM | 893 | N | SER A 116 | 45.807 | 54.672 | 22.285 | 1.00 | 19.43 | N |
| ATOM | 894 | CA | SER A 116 | 46.646 | 54.663 | 21.082 | 1.00 | 19.91 | C |
| ATOM | 895 | C | SER A 116 | 47.497 | 55.938 | 20.852 | 1.00 | 20.59 | C |
| ATOM | 896 | O | SER A 116 | 48.691 | 55.838 | 20.545 | 1.00 | 20.38 | O |
| ATOM | 897 | CB | SER A 116 | 45.789 | 54.406 | 19.821 | 1.00 | 19.21 | C |
| ATOM | 898 | OG | SER A 116 | 45.246 | 53.092 | 19.832 | 1.00 | 19.12 | O |
| ATOM | 899 | N | VAL A 117 | 46.886 | 57.129 | 20.925 | 1.00 | 20.58 | N |
| ATOM | 900 | CA | VAL A 117 | 47.684 | 58.331 | 20.695 | 1.00 | 20.20 | C |
| ATOM | 901 | C | VAL A 117 | 48.798 | 58.423 | 21.754 | 1.00 | 20.34 | C |
| ATOM | 902 | O | VAL A 117 | 49.953 | 58.694 | 21.422 | 1.00 | 20.67 | O |
| ATOM | 903 | CB | VAL A 117 | 46.788 | 59.602 | 20.580 | 1.00 | 20.45 | C |
| ATOM | 904 | CG1 | VAL A 117 | 47.656 | 60.859 | 20.511 | 1.00 | 19.54 | C |
| ATOM | 905 | CG2 | VAL A 117 | 45.982 | 59.530 | 19.223 | 1.00 | 20.05 | C |
| ATOM | 906 | N | PRO A 118 | 48.475 | 58.193 | 23.027 | 1.00 | 19.73 | N |
| ATOM | 907 | CA | PRO A 118 | 49.559 | 58.255 | 24.014 | 1.00 | 20.41 | C |
| ATOM | 908 | C | PRO A 118 | 50.751 | 57.362 | 23.669 | 1.00 | 21.09 | C |
| ATOM | 909 | O | PRO A 118 | 51.910 | 57.761 | 23.879 | 1.00 | 20.60 | O |
| ATOM | 910 | CB | PRO A 118 | 48.887 | 57.793 | 25.303 | 1.00 | 18.64 | C |
| ATOM | 911 | CG | PRO A 118 | 47.504 | 58.473 | 25.136 | 1.00 | 19.94 | C |
| ATOM | 912 | CD | PRO A 118 | 47.160 | 58.117 | 23.694 | 1.00 | 19.13 | C |
| ATOM | 913 | N | GLN A 119 | 50.489 | 56.135 | 23.198 | 1.00 | 20.96 | N |
| ATOM | 914 | CA | GLN A 119 | 51.602 | 55.269 | 22.841 | 1.00 | 21.64 | C |
| ATOM | 915 | C | GLN A 119 | 52.441 | 55.868 | 21.701 | 1.00 | 20.95 | C |
| ATOM | 916 | O | GLN A 119 | 53.643 | 55.686 | 21.687 | 1.00 | 19.80 | O |
| ATOM | 917 | CB | GLN A 119 | 51.094 | 53.875 | 22.436 | 1.00 | 23.85 | C |
| ATOM | 918 | CG | GLN A 119 | 50.761 | 53.079 | 23.703 | 1.00 | 28.54 | C |
| ATOM | 919 | CD | GLN A 119 | 52.009 | 52.894 | 24.540 | 1.00 | 30.76 | C |
| ATOM | 920 | OE1 | GLN A 119 | 52.181 | 53.522 | 25.600 | 1.00 | 32.59 | O |
| ATOM | 921 | NE2 | GLN A 119 | 52.923 | 52.054 | 24.040 | 1.00 | 31.08 | N |
| ATOM | 922 | N | VAL A 120 | 51.812 | 56.564 | 20.750 | 1.00 | 20.13 | N |
| ATOM | 923 | CA | VAL A 120 | 52.577 | 57.146 | 19.644 | 1.00 | 20.73 | C |
| ATOM | 924 | C | VAL A 120 | 53.356 | 58.403 | 20.137 | 1.00 | 20.89 | C |
| ATOM | 925 | O | VAL A 120 | 54.474 | 58.684 | 19.664 | 1.00 | 21.38 | O |
| ATOM | 926 | CB | VAL A 120 | 51.650 | 57.417 | 18.418 | 1.00 | 20.66 | C |
| ATOM | 927 | CG1 | VAL A 120 | 52.458 | 58.037 | 17.277 | 1.00 | 21.79 | C |
| ATOM | 928 | CG2 | VAL A 120 | 51.040 | 56.049 | 17.910 | 1.00 | 20.75 | C |
| ATOM | 929 | N | VAL A 121 | 52.785 | 59.134 | 21.093 | 1.00 | 20.47 | N |
| ATOM | 930 | CA | VAL A 121 | 53.486 | 60.280 | 21.693 | 1.00 | 20.43 | C |
| ATOM | 931 | C | VAL A 121 | 54.759 | 59.724 | 22.352 | 1.00 | 20.78 | C |
| ATOM | 932 | O | VAL A 121 | 55.869 | 60.246 | 22.122 | 1.00 | 21.21 | O |
| ATOM | 933 | CB | VAL A 121 | 52.656 | 60.961 | 22.788 | 1.00 | 20.21 | C |
| ATOM | 934 | CG1 | VAL A 121 | 53.548 | 61.991 | 23.556 | 1.00 | 19.45 | C |
| ATOM | 935 | CG2 | VAL A 121 | 51.436 | 61.679 | 22.151 | 1.00 | 19.20 | C |
| ATOM | 936 | N | ARG A 122 | 54.624 | 58.637 | 23.121 | 1.00 | 19.90 | N |
| ATOM | 937 | CA | ARG A 122 | 55.798 | 58.045 | 23.790 | 1.00 | 20.57 | C |
| ATOM | 938 | C | ARG A 122 | 56.835 | 57.593 | 22.757 | 1.00 | 20.70 | C |
| ATOM | 939 | O | ARG A 122 | 58.055 | 57.777 | 22.936 | 1.00 | 20.18 | O |
| ATOM | 940 | CB | ARG A 122 | 55.385 | 56.847 | 24.668 | 1.00 | 20.55 | C |
| ATOM | 941 | CG | ARG A 122 | 56.542 | 56.195 | 25.445 | 1.00 | 21.96 | C |
| ATOM | 942 | CD | ARG A 122 | 57.207 | 57.132 | 26.520 | 1.00 | 20.83 | C |
| ATOM | 943 | NE | ARG A 122 | 58.393 | 57.840 | 26.000 | 1.00 | 22.46 | N |
| ATOM | 944 | CZ | ARG A 122 | 59.202 | 58.622 | 26.744 | 1.00 | 22.25 | C |
| ATOM | 945 | NH1 | ARG A 122 | 58.948 | 58.826 | 28.033 | 1.00 | 20.36 | N |
| ATOM | 946 | NH2 | ARG A 122 | 60.312 | 59.134 | 26.217 | 1.00 | 22.47 | N |
| ATOM | 947 | N | ARG A 123 | 56.349 | 56.978 | 21.679 | 1.00 | 20.16 | N |
| ATOM | 948 | CA | ARG A 123 | 57.221 | 56.515 | 20.617 | 1.00 | 19.91 | C |
| ATOM | 949 | C | ARG A 123 | 57.993 | 57.689 | 19.945 | 1.00 | 20.62 | C |
| ATOM | 950 | O | ARG A 123 | 59.190 | 57.595 | 19.725 | 1.00 | 20.05 | O |
| ATOM | 951 | CB | ARG A 123 | 56.401 | 55.780 | 19.557 | 1.00 | 21.13 | C |
| ATOM | 952 | CG | ARG A 123 | 57.118 | 55.529 | 18.214 | 1.00 | 19.96 | C |
| ATOM | 953 | CD | ARG A 123 | 58.373 | 54.673 | 18.378 | 1.00 | 20.29 | C |
| ATOM | 954 | NE | ARG A 123 | 59.182 | 54.711 | 17.155 | 1.00 | 19.56 | N |
| ATOM | 955 | CZ | ARG A 123 | 60.519 | 54.737 | 17.137 | 1.00 | 20.31 | C |
| ATOM | 956 | NH1 | ARG A 123 | 61.192 | 54.730 | 18.284 | 1.00 | 19.75 | N |
| ATOM | 957 | NH2 | ARG A 123 | 61.196 | 54.823 | 15.968 | 1.00 | 19.15 | N |
| ATOM | 958 | N | ILE A 124 | 57.291 | 58.763 | 19.603 | 1.00 | 20.82 | N |
| ATOM | 959 | CA | ILE A 124 | 57.941 | 59.907 | 18.956 | 1.00 | 20.79 | C |
| ATOM | 960 | C | ILE A 124 | 58.990 | 60.485 | 19.913 | 1.00 | 21.75 | C |
| ATOM | 961 | O | ILE A 124 | 60.098 | 60.791 | 19.486 | 1.00 | 21.75 | O |
| ATOM | 962 | CB | ILE A 124 | 56.882 | 60.949 | 18.552 | 1.00 | 21.75 | C |
| ATOM | 963 | CG1 | ILE A 124 | 56.110 | 60.399 | 17.336 | 1.00 | 22.31 | C |
| ATOM | 964 | CG2 | ILE A 124 | 57.578 | 62.343 | 18.200 | 1.00 | 20.89 | C |
| ATOM | 965 | CD1 | ILE A 124 | 54.883 | 61.213 | 16.958 | 1.00 | 24.18 | C |
| ATOM | 966 | N | ASN A 125 | 58.669 | 60.585 | 21.209 | 1.00 | 21.25 | N |
| ATOM | 967 | CA | ASN A 125 | 59.654 | 61.107 | 22.158 | 1.00 | 21.84 | C |
| ATOM | 968 | C | ASN A 125 | 60.889 | 60.193 | 22.218 | 1.00 | 22.37 | C |

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ATOM    969  O   ASN A 125      62.034  60.683  22.191  1.00 21.81           O
ATOM    970  CB  ASN A 125      59.050  61.318  23.567  1.00 20.69           C
ATOM    971  CG  ASN A 125      58.422  62.726  23.728  1.00 22.13           C
ATOM    972  OD1 ASN A 125      58.924  63.720  23.157  1.00 21.45           O
ATOM    973  ND2 ASN A 125      57.345  62.816  24.494  1.00 21.48           N
ATOM    974  N   ASN A 126      60.669  58.879  22.242  1.00 21.32           N
ATOM    975  CA  ASN A 126      61.787  57.951  22.267  1.00 22.01           C
ATOM    976  C   ASN A 126      62.663  58.135  21.029  1.00 22.25           C
ATOM    977  O   ASN A 126      63.891  58.051  21.115  1.00 22.74           O
ATOM    978  CB  ASN A 126      61.324  56.478  22.267  1.00 21.25           C
ATOM    979  CG  ASN A 126      60.671  56.080  23.584  1.00 22.90           C
ATOM    980  OD1 ASN A 126      60.888  56.742  24.617  1.00 22.23           O
ATOM    981  ND2 ASN A 126      59.874  55.007  23.562  1.00 20.86           N
ATOM    982  N   ALA A 127      62.027  58.319  19.880  1.00 21.68           N
ATOM    983  CA  ALA A 127      62.770  58.451  18.621  1.00 22.00           C
ATOM    984  C   ALA A 127      63.601  59.747  18.608  1.00 21.88           C
ATOM    985  O   ALA A 127      64.745  59.755  18.167  1.00 21.33           O
ATOM    986  CB  ALA A 127      61.797  58.441  17.419  1.00 20.87           C
ATOM    987  N   LEU A 128      62.994  60.833  19.068  1.00 22.70           N
ATOM    988  CA  LEU A 128      63.687  62.142  19.131  1.00 23.54           C
ATOM    989  C   LEU A 128      64.818  62.034  20.147  1.00 23.88           C
ATOM    990  O   LEU A 128      65.928  62.569  19.934  1.00 25.26           O
ATOM    991  CB  LEU A 128      62.696  63.234  19.543  1.00 22.17           C
ATOM    992  CG  LEU A 128      61.654  63.486  18.443  1.00 22.59           C
ATOM    993  CD1 LEU A 128      60.629  64.466  18.966  1.00 22.37           C
ATOM    994  CD2 LEU A 128      62.314  63.976  17.129  1.00 21.88           C
ATOM    995  N   GLN A 129      64.574  61.315  21.239  1.00 23.42           N
ATOM    996  CA  GLN A 129      65.622  61.143  22.234  1.00 24.00           C
ATOM    997  C   GLN A 129      66.790  60.374  21.651  1.00 24.23           C
ATOM    998  O   GLN A 129      67.963  60.676  21.968  1.00 24.41           O
ATOM    999  CB  GLN A 129      65.097  60.423  23.486  1.00 23.95           C
ATOM   1000  CG  GLN A 129      64.146  61.249  24.321  1.00 24.70           C
ATOM   1001  CD  GLN A 129      63.618  60.417  25.493  1.00 27.07           C
ATOM   1002  OE1 GLN A 129      62.854  59.486  25.282  1.00 28.19           O
ATOM   1003  NE2 GLN A 129      64.063  60.720  26.714  1.00 26.69           N
ATOM   1004  N   ARG A 130      66.506  59.384  20.806  1.00 23.85           N
ATOM   1005  CA  ARG A 130      67.610  58.655  20.203  1.00 24.66           C
ATOM   1006  C   ARG A 130      68.391  59.565  19.241  1.00 25.51           C
ATOM   1007  O   ARG A 130      69.625  59.494  19.190  1.00 25.44           O
ATOM   1008  CB  ARG A 130      67.127  57.419  19.429  1.00 24.60           C
ATOM   1009  CG  ARG A 130      68.279  56.534  18.942  1.00 24.43           C
ATOM   1010  CD  ARG A 130      68.936  55.776  20.114  1.00 25.41           C
ATOM   1011  NE  ARG A 130      68.131  54.615  20.522  1.00 24.46           N
ATOM   1012  CZ  ARG A 130      67.962  54.177  21.768  1.00 24.40           C
ATOM   1013  NH1 ARG A 130      68.524  54.802  22.806  1.00 23.02           N
ATOM   1014  NH2 ARG A 130      67.242  53.057  21.980  1.00 24.26           N
ATOM   1015  N   ALA A 131      67.688  60.400  18.476  1.00 25.47           N
ATOM   1016  CA  ALA A 131      68.388  61.300  17.532  1.00 26.66           C
ATOM   1017  C   ALA A 131      69.323  62.235  18.335  1.00 27.07           C
ATOM   1018  O   ALA A 131      70.475  62.486  17.941  1.00 27.05           O
ATOM   1019  CB  ALA A 131      67.375  62.120  16.705  1.00 25.60           C
ATOM   1020  N   ASP A 132      68.805  62.723  19.455  1.00 27.77           N
ATOM   1021  CA  ASP A 132      69.523  63.580  20.400  1.00 27.80           C
ATOM   1022  C   ASP A 132      70.754  62.822  20.941  1.00 28.09           C
ATOM   1023  O   ASP A 132      71.876  63.366  20.964  1.00 28.29           O
ATOM   1024  CB  ASP A 132      68.557  63.978  21.545  1.00 28.94           C
ATOM   1025  CG  ASP A 132      69.225  64.852  22.631  1.00 30.18           C
ATOM   1026  OD1 ASP A 132      69.668  65.977  22.316  1.00 30.05           O
ATOM   1027  OD2 ASP A 132      69.302  64.422  23.794  1.00 30.12           O
ATOM   1028  N   GLN A 133      70.587  61.569  21.370  1.00 27.41           N
ATOM   1029  CA  GLN A 133      71.725  60.786  21.876  1.00 27.40           C
ATOM   1030  C   GLN A 133      72.833  60.612  20.833  1.00 27.92           C
ATOM   1031  O   GLN A 133      74.035  60.762  21.140  1.00 27.98           O
ATOM   1032  CB  GLN A 133      71.268  59.391  22.345  1.00 27.31           C
ATOM   1033  CG  GLN A 133      70.419  59.447  23.608  1.00 26.65           C
ATOM   1034  CD  GLN A 133      69.409  58.274  23.720  1.00 26.77           C
ATOM   1035  OE1 GLN A 133      68.621  58.205  24.689  1.00 28.45           O
ATOM   1036  NE2 GLN A 133      69.443  57.367  22.774  1.00 23.55           N
ATOM   1037  N   ILE A 134      72.433  60.295  19.607  1.00 27.08           N
ATOM   1038  CA  ILE A 134      73.375  60.091  18.505  1.00 28.12           C
ATOM   1039  C   ILE A 134      74.128  61.399  18.194  1.00 29.32           C
ATOM   1040  O   ILE A 134      75.345  61.391  17.976  1.00 29.87           O
ATOM   1041  CB  ILE A 134      72.632  59.621  17.220  1.00 27.57           C
ATOM   1042  CG1 ILE A 134      72.011  58.231  17.473  1.00 28.08           C
ATOM   1043  CG2 ILE A 134      73.616  59.544  16.024  1.00 27.26           C
ATOM   1044  CD1 ILE A 134      70.901  57.863  16.495  1.00 26.43           C
ATOM   1045  N   ALA A 135      73.390  62.503  18.156  1.00 29.88           N
ATOM   1046  CA  ALA A 135      73.958  63.819  17.881  1.00 31.15           C
ATOM   1047  C   ALA A 135      75.027  64.170  18.911  1.00 32.42           C
ATOM   1048  O   ALA A 135      76.092  64.700  18.574  1.00 32.68           O
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| ATOM | 1049 | CB  | ALA A 135 | 72.860 | 64.881 | 17.917 | 1.00 | 30.63 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1050 | N   | LYS A 136 | 74.728 | 63.882 | 20.169 | 1.00 | 33.06 | N |
| ATOM | 1051 | CA  | LYS A 136 | 75.633 | 64.205 | 21.241 | 1.00 | 34.24 | C |
| ATOM | 1052 | C   | LYS A 136 | 76.943 | 63.427 | 21.123 | 1.00 | 35.06 | C |
| ATOM | 1053 | O   | LYS A 136 | 78.033 | 63.992 | 21.294 | 1.00 | 35.14 | O |
| ATOM | 1054 | CB  | LYS A 136 | 74.957 | 63.951 | 22.601 | 1.00 | 34.66 | C |
| ATOM | 1055 | CG  | LYS A 136 | 75.789 | 64.432 | 23.782 | 1.00 | 36.22 | C |
| ATOM | 1056 | CD  | LYS A 136 | 75.211 | 64.023 | 25.125 | 1.00 | 37.31 | C |
| ATOM | 1057 | CE  | LYS A 136 | 76.081 | 64.560 | 26.273 | 1.00 | 38.00 | C |
| ATOM | 1058 | NZ  | LYS A 136 | 75.344 | 64.573 | 27.582 | 1.00 | 37.58 | N |
| ATOM | 1059 | N   | ILE A 137 | 76.880 | 62.134 | 20.819 | 1.00 | 35.09 | N |
| ATOM | 1060 | CA  | ILE A 137 | 78.133 | 61.415 | 20.724 | 1.00 | 35.28 | C |
| ATOM | 1061 | C   | ILE A 137 | 78.876 | 61.704 | 19.410 | 1.00 | 36.49 | C |
| ATOM | 1062 | O   | ILE A 137 | 80.071 | 61.396 | 19.287 | 1.00 | 36.68 | O |
| ATOM | 1063 | CB  | ILE A 137 | 77.933 | 59.884 | 20.886 | 1.00 | 34.56 | C |
| ATOM | 1064 | CG1 | ILE A 137 | 77.226 | 59.299 | 19.676 | 1.00 | 32.73 | C |
| ATOM | 1065 | CG2 | ILE A 137 | 77.123 | 59.598 | 22.163 | 1.00 | 33.65 | C |
| ATOM | 1066 | CD1 | ILE A 137 | 77.291 | 57.774 | 19.674 | 1.00 | 32.65 | C |
| ATOM | 1067 | N   | GLU A 138 | 78.177 | 62.283 | 18.439 | 1.00 | 37.12 | N |
| ATOM | 1068 | CA  | GLU A 138 | 78.769 | 62.599 | 17.140 | 1.00 | 38.63 | C |
| ATOM | 1069 | C   | GLU A 138 | 79.250 | 64.049 | 17.096 | 1.00 | 38.67 | C |
| ATOM | 1070 | O   | GLU A 138 | 79.856 | 64.473 | 16.103 | 1.00 | 38.77 | O |
| ATOM | 1071 | CB  | GLU A 138 | 77.736 | 62.445 | 16.024 | 1.00 | 40.31 | C |
| ATOM | 1072 | CG  | GLU A 138 | 77.173 | 61.058 | 15.848 | 1.00 | 43.97 | C |
| ATOM | 1073 | CD  | GLU A 138 | 78.014 | 60.222 | 14.925 | 1.00 | 46.41 | C |
| ATOM | 1074 | OE1 | GLU A 138 | 79.195 | 59.941 | 15.250 | 1.00 | 47.78 | O |
| ATOM | 1075 | OE2 | GLU A 138 | 77.493 | 59.844 | 13.857 | 1.00 | 48.57 | O |
| ATOM | 1076 | N   | GLY A 139 | 78.938 | 64.806 | 18.139 | 1.00 | 38.22 | N |
| ATOM | 1077 | CA  | GLY A 139 | 79.307 | 66.203 | 18.177 | 1.00 | 38.46 | C |
| ATOM | 1078 | C   | GLY A 139 | 78.489 | 67.026 | 17.193 | 1.00 | 39.03 | C |
| ATOM | 1079 | O   | GLY A 139 | 78.917 | 68.110 | 16.779 | 1.00 | 39.61 | O |
| ATOM | 1080 | N   | ASP A 140 | 77.320 | 66.521 | 16.798 | 1.00 | 38.26 | N |
| ATOM | 1081 | CA  | ASP A 140 | 76.458 | 67.218 | 15.848 | 1.00 | 37.36 | C |
| ATOM | 1082 | C   | ASP A 140 | 75.621 | 68.246 | 16.570 | 1.00 | 37.36 | C |
| ATOM | 1083 | O   | ASP A 140 | 74.781 | 67.892 | 17.405 | 1.00 | 37.02 | O |
| ATOM | 1084 | CB  | ASP A 140 | 75.560 | 66.206 | 15.145 | 1.00 | 37.75 | C |
| ATOM | 1085 | CG  | ASP A 140 | 74.563 | 66.852 | 14.214 | 1.00 | 38.27 | C |
| ATOM | 1086 | OD1 | ASP A 140 | 74.667 | 68.083 | 13.977 | 1.00 | 36.93 | O |
| ATOM | 1087 | OD2 | ASP A 140 | 73.672 | 66.110 | 13.721 | 1.00 | 38.43 | O |
| ATOM | 1088 | N   | THR A 141 | 75.835 | 69.522 | 16.266 | 1.00 | 36.56 | N |
| ATOM | 1089 | CA  | THR A 141 | 75.078 | 70.549 | 16.946 | 1.00 | 37.00 | C |
| ATOM | 1090 | C   | THR A 141 | 74.224 | 71.290 | 15.922 | 1.00 | 37.18 | C |
| ATOM | 1091 | O   | THR A 141 | 73.751 | 72.398 | 16.179 | 1.00 | 37.50 | O |
| ATOM | 1092 | CB  | THR A 141 | 76.014 | 71.574 | 17.671 | 1.00 | 37.84 | C |
| ATOM | 1093 | OG1 | THR A 141 | 76.844 | 72.206 | 16.699 | 1.00 | 37.62 | O |
| ATOM | 1094 | CG2 | THR A 141 | 76.919 | 70.898 | 18.695 | 1.00 | 37.65 | C |
| ATOM | 1095 | N   | SER A 142 | 74.012 | 70.671 | 14.765 | 1.00 | 36.97 | N |
| ATOM | 1096 | CA  | SER A 142 | 73.218 | 71.297 | 13.722 | 1.00 | 36.73 | C |
| ATOM | 1097 | C   | SER A 142 | 71.767 | 71.518 | 14.134 | 1.00 | 36.48 | C |
| ATOM | 1098 | O   | SER A 142 | 71.141 | 72.484 | 13.694 | 1.00 | 36.08 | O |
| ATOM | 1099 | CB  | SER A 142 | 73.279 | 70.484 | 12.432 | 1.00 | 37.50 | C |
| ATOM | 1100 | OG  | SER A 142 | 72.877 | 69.141 | 12.626 | 1.00 | 38.62 | O |
| ATOM | 1101 | N   | VAL A 143 | 71.225 | 70.628 | 14.965 | 1.00 | 35.18 | N |
| ATOM | 1102 | CA  | VAL A 143 | 69.850 | 70.809 | 15.426 | 1.00 | 34.22 | C |
| ATOM | 1103 | C   | VAL A 143 | 69.950 | 71.253 | 16.858 | 1.00 | 33.93 | C |
| ATOM | 1104 | O   | VAL A 143 | 70.549 | 70.593 | 17.695 | 1.00 | 33.85 | O |
| ATOM | 1105 | CB  | VAL A 143 | 68.997 | 69.497 | 15.331 | 1.00 | 33.43 | C |
| ATOM | 1106 | CG1 | VAL A 143 | 67.624 | 69.688 | 16.037 | 1.00 | 31.97 | C |
| ATOM | 1107 | CG2 | VAL A 143 | 68.760 | 69.168 | 13.883 | 1.00 | 32.33 | C |
| ATOM | 1108 | N   | GLU A 144 | 69.341 | 72.378 | 17.150 | 1.00 | 34.73 | N |
| ATOM | 1109 | CA  | GLU A 144 | 69.419 | 72.909 | 18.494 | 1.00 | 35.70 | C |
| ATOM | 1110 | C   | GLU A 144 | 68.509 | 72.210 | 19.499 | 1.00 | 34.37 | C |
| ATOM | 1111 | O   | GLU A 144 | 68.859 | 72.111 | 20.661 | 1.00 | 34.36 | O |
| ATOM | 1112 | CB  | GLU A 144 | 69.094 | 74.394 | 18.470 | 1.00 | 38.94 | C |
| ATOM | 1113 | CG  | GLU A 144 | 69.538 | 75.078 | 19.713 | 1.00 | 43.83 | C |
| ATOM | 1114 | CD  | GLU A 144 | 68.431 | 75.926 | 20.307 | 1.00 | 47.45 | C |
| ATOM | 1115 | OE1 | GLU A 144 | 67.296 | 75.394 | 20.525 | 1.00 | 48.79 | O |
| ATOM | 1116 | OE2 | GLU A 144 | 68.705 | 77.129 | 20.560 | 1.00 | 49.44 | O |
| ATOM | 1117 | N   | ASN A 145 | 67.340 | 71.734 | 19.064 | 1.00 | 32.23 | N |
| ATOM | 1118 | CA  | ASN A 145 | 66.424 | 71.063 | 19.999 | 1.00 | 29.95 | C |
| ATOM | 1119 | C   | ASN A 145 | 65.786 | 69.850 | 19.341 | 1.00 | 28.54 | C |
| ATOM | 1120 | O   | ASN A 145 | 64.839 | 69.983 | 18.572 | 1.00 | 28.20 | O |
| ATOM | 1121 | CB  | ASN A 145 | 65.298 | 72.008 | 20.441 | 1.00 | 29.60 | C |
| ATOM | 1122 | CG  | ASN A 145 | 64.320 | 71.340 | 21.410 | 1.00 | 29.35 | C |
| ATOM | 1123 | OD1 | ASN A 145 | 63.126 | 71.650 | 21.416 | 1.00 | 29.83 | O |
| ATOM | 1124 | ND2 | ASN A 145 | 64.821 | 70.423 | 22.221 | 1.00 | 28.97 | N |
| ATOM | 1125 | N   | TRP A 146 | 66.310 | 68.673 | 19.638 | 1.00 | 27.07 | N |
| ATOM | 1126 | CA  | TRP A 146 | 65.742 | 67.462 | 19.072 | 1.00 | 27.05 | C |
| ATOM | 1127 | C   | TRP A 146 | 64.366 | 67.189 | 19.689 | 1.00 | 26.58 | C |
| ATOM | 1128 | O   | TRP A 146 | 63.476 | 66.641 | 19.028 | 1.00 | 28.27 | O |

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ATOM   1129  CB   TRP A 146    66.689  66.272  19.286  1.00 25.18           C
ATOM   1130  CG   TRP A 146    67.773  66.254  18.252  1.00 25.95           C
ATOM   1131  CD1  TRP A 146    69.096  66.633  18.411  1.00 26.00           C
ATOM   1132  CD2  TRP A 146    67.628  65.878  16.876  1.00 26.82           C
ATOM   1133  NE1  TRP A 146    69.768  66.504  17.205  1.00 27.23           N
ATOM   1134  CE2  TRP A 146    68.892  66.045  16.253  1.00 27.05           C
ATOM   1135  CE3  TRP A 146    66.547  65.422  16.102  1.00 26.93           C
ATOM   1136  CZ2  TRP A 146    69.101  65.765  14.899  1.00 27.57           C
ATOM   1137  CZ3  TRP A 146    66.759  65.149  14.752  1.00 26.34           C
ATOM   1138  CH2  TRP A 146    68.029  65.319  14.171  1.00 27.82           C
ATOM   1139  N    LEU A 147    64.184  67.593  20.942  1.00 26.60           N
ATOM   1140  CA   LEU A 147    62.906  67.349  21.611  1.00 26.54           C
ATOM   1141  C    LEU A 147    61.870  68.415  21.293  1.00 25.67           C
ATOM   1142  O    LEU A 147    61.486  69.194  22.144  1.00 25.66           O
ATOM   1143  CB   LEU A 147    63.113  67.224  23.114  1.00 26.62           C
ATOM   1144  CG   LEU A 147    63.764  65.882  23.464  1.00 28.88           C
ATOM   1145  CD1  LEU A 147    64.238  65.917  24.911  1.00 29.94           C
ATOM   1146  CD2  LEU A 147    62.719  64.735  23.259  1.00 29.20           C
ATOM   1147  N    ALA A 148    61.436  68.425  20.048  1.00 25.11           N
ATOM   1148  CA   ALA A 148    60.439  69.355  19.601  1.00 25.45           C
ATOM   1149  C    ALA A 148    59.149  68.988  20.328  1.00 25.92           C
ATOM   1150  O    ALA A 148    58.875  67.800  20.601  1.00 24.70           O
ATOM   1151  CB   ALA A 148    60.250  69.246  18.081  1.00 25.99           C
ATOM   1152  N    PRO A 149    58.376  70.014  20.714  1.00 25.25           N
ATOM   1153  CA   PRO A 149    57.114  69.757  21.417  1.00 24.66           C
ATOM   1154  C    PRO A 149    56.116  69.025  20.532  1.00 24.08           C
ATOM   1155  O    PRO A 149    56.036  69.269  19.302  1.00 23.70           O
ATOM   1156  CB   PRO A 149    56.628  71.147  21.816  1.00 24.93           C
ATOM   1157  CG   PRO A 149    57.292  72.094  20.767  1.00 26.03           C
ATOM   1158  CD   PRO A 149    58.676  71.460  20.614  1.00 25.89           C
ATOM   1159  N    ILE A 150    55.348  68.131  21.157  1.00 23.12           N
ATOM   1160  CA   ILE A 150    54.349  67.361  20.422  1.00 22.33           C
ATOM   1161  C    ILE A 150    52.950  67.840  20.720  1.00 22.81           C
ATOM   1162  O    ILE A 150    52.557  67.969  21.886  1.00 23.16           O
ATOM   1163  CB   ILE A 150    54.443  65.852  20.792  1.00 23.18           C
ATOM   1164  CG1  ILE A 150    55.835  65.308  20.402  1.00 22.09           C
ATOM   1165  CG2  ILE A 150    53.358  65.050  20.058  1.00 21.11           C
ATOM   1166  CD1  ILE A 150    56.200  64.005  21.135  1.00 22.77           C
ATOM   1167  N    VAL A 151    52.189  68.111  19.670  1.00 22.68           N
ATOM   1168  CA   VAL A 151    50.790  68.506  19.863  1.00 23.04           C
ATOM   1169  C    VAL A 151    49.985  67.296  19.354  1.00 23.21           C
ATOM   1170  O    VAL A 151    50.117  66.886  18.191  1.00 22.75           O
ATOM   1171  CB   VAL A 151    50.431  69.769  19.044  1.00 23.38           C
ATOM   1172  CG1  VAL A 151    48.934  70.004  19.119  1.00 21.42           C
ATOM   1173  CG2  VAL A 151    51.184  70.990  19.635  1.00 22.20           C
ATOM   1174  N    ALA A 152    49.172  66.727  20.248  1.00 23.26           N
ATOM   1175  CA   ALA A 152    48.428  65.526  19.940  1.00 22.90           C
ATOM   1176  C    ALA A 152    46.920  65.699  19.936  1.00 23.11           C
ATOM   1177  O    ALA A 152    46.343  66.529  20.654  1.00 23.57           O
ATOM   1178  CB   ALA A 152    48.828  64.413  20.922  1.00 22.55           C
ATOM   1179  N    ASP A 153    46.317  64.852  19.130  1.00 22.28           N
ATOM   1180  CA   ASP A 153    44.891  64.780  18.871  1.00 22.51           C
ATOM   1181  C    ASP A 153    44.196  63.995  19.989  1.00 22.17           C
ATOM  ·1182  O    ASP A 153    44.438  62.788  20.136  1.00 22.16           O
ATOM   1183  CB   ASP A 153    44.743  64.039  17.519  1.00 21.47           C
ATOM   1184  CG   ASP A 153    43.339  64.052  16.957  1.00 22.35           C
ATOM   1185  OD1  ASP A 153    42.351  64.254  17.717  1.00 21.98           O
ATOM   1186  OD2  ASP A 153    43.244  63.843  15.721  1.00 22.36           O
ATOM   1187  N    GLY A 154    43.341  64.659  20.771  1.00 21.49           N
ATOM   1188  CA   GLY A 154    42.602  63.955  21.818  1.00 20.57           C
ATOM   1189  C    GLY A 154    41.195  63.575  21.367  1.00 20.95           C
ATOM   1190  O    GLY A 154    40.407  63.086  22.179  1.00 20.38           O
ATOM   1191  N    GLU A 155    40.869  63.784  20.087  1.00 20.79           N
ATOM   1192  CA   GLU A 155    39.511  63.496  19.575  1.00 22.18           C
ATOM   1193  C    GLU A 155    38.536  64.258  20.501  1.00 23.38           C
ATOM   1194  O    GLU A 155    38.746  65.456  20.745  1.00 23.46           O
ATOM   1195  CB   GLU A 155    39.222  61.972  19.604  1.00 21.89           C
ATOM   1196  CG   GLU A 155    40.256  61.159  18.833  1.00 22.54           C
ATOM   1197  CD   GLU A 155    40.098  61.167  17.292  1.00 24.57           C
ATOM   1198  OE1  GLU A 155    39.214  61.877  16.712  1.00 24.26           O
ATOM   1199  OE2  GLU A 155    40.886  60.425  16.645  1.00 24.54           O
ATOM   1200  N    ALA A 156    37.481  63.595  20.981  1.00 23.39           N
ATOM   1201  CA   ALA A 156    36.573  64.212  21.966  1.00 23.99           C
ATOM   1202  C    ALA A 156    36.753  63.435  23.266  1.00 24.23           C
ATOM   1203  O    ALA A 156    35.842  63.338  24.094  1.00 24.79           O
ATOM   1204  CB   ALA A 156    35.119  64.152  21.515  1.00 23.35           C
ATOM   1205  N    GLY A 157    37.936  62.864  23.455  1.00 23.95           N
ATOM   1206  CA   GLY A 157    38.196  62.145  24.699  1.00 24.05           C
ATOM   1207  C    GLY A 157    37.659  60.720  24.902  1.00 24.61           C
ATOM   1208  O    GLY A 157    37.825  60.169  25.993  1.00 23.49           O
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| ATOM | 1209 | N   | PHE A 158 | 37.008 | 60.139 | 23.891 | 1.00 | 23.78 | N |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1210 | CA  | PHE A 158 | 36.527 | 58.743 | 23.954 | 1.00 | 23.67 | C |
| ATOM | 1211 | C   | PHE A 158 | 35.518 | 58.485 | 25.083 | 1.00 | 23.63 | C |
| ATOM | 1212 | O   | PHE A 158 | 35.603 | 57.475 | 25.827 | 1.00 | 23.31 | O |
| ATOM | 1213 | CB  | PHE A 158 | 37.734 | 57.772 | 24.101 | 1.00 | 23.92 | C |
| ATOM | 1214 | CG  | PHE A 158 | 38.649 | 57.740 | 22.894 | 1.00 | 23.96 | C |
| ATOM | 1215 | CD1 | PHE A 158 | 38.361 | 56.919 | 21.804 | 1.00 | 23.58 | C |
| ATOM | 1216 | CD2 | PHE A 158 | 39.764 | 58.566 | 22.821 | 1.00 | 24.47 | C |
| ATOM | 1217 | CE1 | PHE A 158 | 39.162 | 56.936 | 20.658 | 1.00 | 24.86 | C |
| ATOM | 1218 | CE2 | PHE A 158 | 40.587 | 58.598 | 21.669 | 1.00 | 25.16 | C |
| ATOM | 1219 | CZ  | PHE A 158 | 40.286 | 57.784 | 20.582 | 1.00 | 24.74 | C |
| ATOM | 1220 | N   | GLY A 159 | 34.565 | 59.392 | 25.229 | 1.00 | 23.06 | N |
| ATOM | 1221 | CA  | GLY A 159 | 33.546 | 59.152 | 26.234 | 1.00 | 23.42 | C |
| ATOM | 1222 | C   | GLY A 159 | 33.191 | 60.405 | 26.986 | 1.00 | 23.58 | C |
| ATOM | 1223 | O   | GLY A 159 | 33.010 | 61.449 | 26.357 | 1.00 | 22.69 | O |
| ATOM | 1224 | N   | GLY A 160 | 33.121 | 60.304 | 28.315 | 1.00 | 23.09 | N |
| ATOM | 1225 | CA  | GLY A 160 | 32.759 | 61.454 | 29.127 | 1.00 | 23.29 | C |
| ATOM | 1226 | C   | GLY A 160 | 33.941 | 62.202 | 29.732 | 1.00 | 23.15 | C |
| ATOM | 1227 | O   | GLY A 160 | 35.089 | 62.074 | 29.295 | 1.00 | 22.42 | O |
| ATOM | 1228 | N   | ALA A 161 | 33.672 | 62.963 | 30.776 | 1.00 | 22.95 | N |
| ATOM | 1229 | CA  | ALA A 161 | 34.742 | 63.755 | 31.372 | 1.00 | 23.43 | C |
| ATOM | 1230 | C   | ALA A 161 | 35.854 | 62.899 | 31.960 | 1.00 | 23.10 | C |
| ATOM | 1231 | O   | ALA A 161 | 37.018 | 63.330 | 31.964 | 1.00 | 23.65 | O |
| ATOM | 1232 | CB  | ALA A 161 | 34.180 | 64.729 | 32.452 | 1.00 | 23.67 | C |
| ATOM | 1233 | N   | LEU A 162 | 35.522 | 61.711 | 32.467 | 1.00 | 21.78 | N |
| ATOM | 1234 | CA  | LEU A 162 | 36.564 | 60.878 | 33.040 | 1.00 | 22.04 | C |
| ATOM | 1235 | C   | LEU A 162 | 37.415 | 60.247 | 31.945 | 1.00 | 21.88 | C |
| ATOM | 1236 | O   | LEU A 162 | 38.624 | 59.968 | 32.167 | 1.00 | 21.09 | O |
| ATOM | 1237 | CB  | LEU A 162 | 35.967 | 59.799 | 33.956 | 1.00 | 22.61 | C |
| ATOM | 1238 | CG  | LEU A 162 | 35.075 | 60.406 | 35.071 | 1.00 | 23.82 | C |
| ATOM | 1239 | CD1 | LEU A 162 | 34.483 | 59.264 | 35.931 | 1.00 | 24.36 | C |
| ATOM | 1240 | CD2 | LEU A 162 | 35.889 | 61.356 | 35.948 | 1.00 | 24.84 | C |
| ATOM | 1241 | N   | ASN A 163 | 36.807 | 59.980 | 30.784 | 1.00 | 21.04 | N |
| ATOM | 1242 | CA  | ASN A 163 | 37.596 | 59.433 | 29.668 | 1.00 | 21.76 | C |
| ATOM | 1243 | C   | ASN A 163 | 38.542 | 60.546 | 29.170 | 1.00 | 21.45 | C |
| ATOM | 1244 | O   | ASN A 163 | 39.712 | 60.275 | 28.863 | 1.00 | 20.26 | O |
| ATOM | 1245 | CB  | ASN A 163 | 36.691 | 58.932 | 28.523 | 1.00 | 21.28 | C |
| ATOM | 1246 | CG  | ASN A 163 | 35.831 | 57.739 | 28.949 | 1.00 | 22.78 | C |
| ATOM | 1247 | OD1 | ASN A 163 | 36.298 | 56.551 | 28.967 | 1.00 | 23.37 | O |
| ATOM | 1248 | ND2 | ASN A 163 | 34.602 | 58.027 | 29.324 | 1.00 | 20.34 | N |
| ATOM | 1249 | N   | VAL A 164 | 38.047 | 61.789 | 29.074 | 1.00 | 21.94 | N |
| ATOM | 1250 | CA  | VAL A 164 | 38.956 | 62.854 | 28.630 | 1.00 | 22.91 | C |
| ATOM | 1251 | C   | VAL A 164 | 40.089 | 63.010 | 29.673 | 1.00 | 21.98 | C |
| ATOM | 1252 | O   | VAL A 164 | 41.234 | 63.187 | 29.311 | 1.00 | 21.34 | O |
| ATOM | 1253 | CB  | VAL A 164 | 38.284 | 64.271 | 28.479 | 1.00 | 24.61 | C |
| ATOM | 1254 | CG1 | VAL A 164 | 37.088 | 64.222 | 27.498 | 1.00 | 24.10 | C |
| ATOM | 1255 | CG2 | VAL A 164 | 37.827 | 64.726 | 29.744 | 1.00 | 29.01 | C |
| ATOM | 1256 | N   | TYR A 165 | 39.752 | 62.915 | 30.957 | 1.00 | 21.49 | N |
| ATOM | 1257 | CA  | TYR A 165 | 40.753 | 63.087 | 32.013 | 1.00 | 21.80 | C |
| ATOM | 1258 | C   | TYR A 165 | 41.903 | 62.065 | 31.848 | 1.00 | 21.82 | C |
| ATOM | 1259 | O   | TYR A 165 | 43.084 | 62.406 | 31.897 | 1.00 | 19.66 | O |
| ATOM | 1260 | CB  | TYR A 165 | 40.100 | 62.915 | 33.410 | 1.00 | 21.46 | C |
| ATOM | 1261 | CG  | TYR A 165 | 41.080 | 63.100 | 34.563 | 1.00 | 22.48 | C |
| ATOM | 1262 | CD1 | TYR A 165 | 41.922 | 62.051 | 34.960 | 1.00 | 23.31 | C |
| ATOM | 1263 | CD2 | TYR A 165 | 41.222 | 64.345 | 35.211 | 1.00 | 22.77 | C |
| ATOM | 1264 | CE1 | TYR A 165 | 42.891 | 62.233 | 35.972 | 1.00 | 22.57 | C |
| ATOM | 1265 | CE2 | TYR A 165 | 42.187 | 64.531 | 36.223 | 1.00 | 22.76 | C |
| ATOM | 1266 | CZ  | TYR A 165 | 43.011 | 63.474 | 36.580 | 1.00 | 22.76 | C |
| ATOM | 1267 | OH  | TYR A 165 | 44.019 | 63.659 | 37.510 | 1.00 | 23.86 | O |
| ATOM | 1268 | N   | GLU A 166 | 41.515 | 60.808 | 31.689 | 1.00 | 21.24 | N |
| ATOM | 1269 | CA  | GLU A 166 | 42.487 | 59.732 | 31.561 | 1.00 | 21.43 | C |
| ATOM | 1270 | C   | GLU A 166 | 43.301 | 59.839 | 30.283 | 1.00 | 20.63 | C |
| ATOM | 1271 | O   | GLU A 166 | 44.502 | 59.511 | 30.295 | 1.00 | 21.14 | O |
| ATOM | 1272 | CB  | GLU A 166 | 41.762 | 58.369 | 31.636 | 1.00 | 21.40 | C |
| ATOM | 1273 | CG  | GLU A 166 | 41.312 | 58.027 | 33.069 | 1.00 | 22.06 | C |
| ATOM | 1274 | CD  | GLU A 166 | 42.501 | 58.027 | 34.034 | 1.00 | 22.37 | C |
| ATOM | 1275 | OE1 | GLU A 166 | 43.484 | 57.307 | 33.762 | 1.00 | 22.58 | O |
| ATOM | 1276 | OE2 | GLU A 166 | 42.471 | 58.754 | 35.055 | 1.00 | 22.27 | O |
| ATOM | 1277 | N   | LEU A 167 | 42.688 | 60.299 | 29.190 | 1.00 | 19.60 | N |
| ATOM | 1278 | CA  | LEU A 167 | 43.474 | 60.429 | 27.955 | 1.00 | 20.02 | C |
| ATOM | 1279 | C   | LEU A 167 | 44.529 | 61.566 | 28.149 | 1.00 | 19.36 | C |
| ATOM | 1280 | O   | LEU A 167 | 45.694 | 61.421 | 27.784 | 1.00 | 18.30 | O |
| ATOM | 1281 | CB  | LEU A 167 | 42.557 | 60.755 | 26.762 | 1.00 | 19.49 | C |
| ATOM | 1282 | CG  | LEU A 167 | 43.275 | 61.087 | 25.441 | 1.00 | 20.63 | C |
| ATOM | 1283 | CD1 | LEU A 167 | 44.258 | 59.982 | 25.034 | 1.00 | 18.70 | C |
| ATOM | 1284 | CD2 | LEU A 167 | 42.190 | 61.304 | 24.344 | 1.00 | 19.49 | C |
| ATOM | 1285 | N   | GLN A 168 | 44.107 | 62.691 | 28.727 | 1.00 | 19.97 | N |
| ATOM | 1286 | CA  | GLN A 168 | 45.050 | 63.828 | 28.940 | 1.00 | 20.92 | C |
| ATOM | 1287 | C   | GLN A 168 | 46.164 | 63.327 | 29.869 | 1.00 | 20.99 | C |
| ATOM | 1288 | O   | GLN A 168 | 47.350 | 63.569 | 29.635 | 1.00 | 21.71 | O |

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ATOM   1289  CB  GLN A 168      44.334  65.038  29.612  1.00 21.21           C
ATOM   1290  CG  GLN A 168      45.261  66.199  29.940  1.00 21.29           C
ATOM   1291  CD  GLN A 168      45.630  67.042  28.725  1.00 21.63           C
ATOM   1292  OE1 GLN A 168      46.002  66.507  27.676  1.00 21.87           O
ATOM   1293  NE2 GLN A 168      45.565  68.382  28.869  1.00 20.69           N
ATOM   1294  N   LYS A 169      45.787  62.602  30.917  1.00 20.86           N
ATOM   1295  CA  LYS A 169      46.815  62.082  31.833  1.00 20.89           C
ATOM   1296  C   LYS A 169      47.813  61.162  31.114  1.00 20.65           C
ATOM   1297  O   LYS A 169      49.043  61.249  31.326  1.00 20.39           O
ATOM   1298  CB  LYS A 169      46.157  61.315  33.003  1.00 21.06           C
ATOM   1299  CG  LYS A 169      47.175  60.590  33.970  1.00 21.52           C
ATOM   1300  CD  LYS A 169      46.465  60.130  35.266  1.00 22.85           C
ATOM   1301  CE  LYS A 169      47.297  59.064  36.039  1.00 24.34           C
ATOM   1302  NZ  LYS A 169      46.589  58.669  37.328  1.00 25.34           N
ATOM   1303  N   ALA A 170      47.297  60.286  30.251  1.00 19.72           N
ATOM   1304  CA  ALA A 170      48.167  59.359  29.527  1.00 19.95           C
ATOM   1305  C   ALA A 170      49.070  60.087  28.493  1.00 19.18           C
ATOM   1306  O   ALA A 170      50.249  59.735  28.287  1.00 18.45           O
ATOM   1307  CB  ALA A 170      47.308  58.278  28.845  1.00 19.45           C
ATOM   1308  N   LEU A 171      48.510  61.092  27.842  1.00 19.46           N
ATOM   1309  CA  LEU A 171      49.283  61.918  26.897  1.00 19.80           C
ATOM   1310  C   LEU A 171      50.439  62.586  27.666  1.00 19.94           C
ATOM   1311  O   LEU A 171      51.580  62.573  27.210  1.00 20.84           O
ATOM   1312  CB  LEU A 171      48.409  63.015  26.259  1.00 19.32           C
ATOM   1313  CG  LEU A 171      47.263  62.521  25.335  1.00 19.88           C
ATOM   1314  CD1 LEU A 171      46.372  63.708  24.946  1.00 19.56           C
ATOM   1315  CD2 LEU A 171      47.840  61.873  24.079  1.00 19.70           C
ATOM   1316  N   ILE A 172      50.152  63.145  28.838  1.00 20.61           N
ATOM   1317  CA  ILE A 172      51.207  63.791  29.630  1.00 20.32           C
ATOM   1318  C   ILE A 172.     52.265  62.771  30.068  1.00 20.78           C
ATOM   1319  O   ILE A 172      53.487  63.014  29.950  1.00 20.35           O
ATOM   1320  CB  ILE A 172      50.568  64.499  30.840  1.00 20.37           C
ATOM   1321  CG1 ILE A 172      49.815  65.736  30.324  1.00 20.21           C
ATOM   1322  CG2 ILE A 172      51.626  64.853  31.898  1.00 20.46           C
ATOM   1323  CD1 ILE A 172      48.944  66.388  31.370  1.00 20.09           C
ATOM   1324  N   ALA A 173      51.822  61.601  30.535  1.00 20.95           N
ATOM   1325  CA  ALA A 173      52.803  60.589  30.948  1.00 20.91           C
ATOM   1326  C   ALA A 173      53.777  60.255  29.805  1.00 21.14           C
ATOM   1327  O   ALA A 173      54.980  60.021  30.035  1.00 22.23           O
ATOM   1328  CB  ALA A 173      52.083  59.286  31.438  1.00 20.32           C
ATOM   1329  N   ALA A 174      53.255  60.221  28.587  1.00 20.77           N
ATOM   1330  CA  ALA A 174      54.030  59.898  27.404  1.00 21.07           C
ATOM   1331  C   ALA A 174      54.900  61.088  26.961  1.00 21.08           C
ATOM   1332  O   ALA A 174      55.760  60.919  26.110  1.00 20.74           O
ATOM   1333  CB  ALA A 174      53.089  59.480  26.221  1.00 20.48           C
ATOM   1334  N   GLY A 175      54.660  62.275  27.523  1.00 21.51           N
ATOM   1335  CA  GLY A 175      55.491  63.441  27.190  1.00 21.60           C
ATOM   1336  C   GLY A 175      54.906  64.443  26.212  1.00 21.59           C
ATOM   1337  O   GLY A 175      55.657  65.158  25.536  1.00 22.24           O
ATOM   1338  N   VAL A 176      53.581  64.528  26.135  1.00 20.85           N
ATOM   1339  CA  VAL A 176      52.958  65.465  25.201  1.00 21.49           C
ATOM   1340  C   VAL A 176      53.168  66.926  25.650  1.00 21.95           C
ATOM   1341  O   VAL A 176      53.308  67.200  26.844  1.00 22.25           O
ATOM   1342  CB  VAL A 176      51.409  65.170  25.057  1.00 21.66           C
ATOM   1343  CG1 VAL A 176      50.578  66.034  26.045  1.00 21.04           C
ATOM   1344  CG2 VAL A 176      50.963  65.412  23.597  1.00 21.02           C
ATOM   1345  N   ALA A 177      53.174  67.861  24.697  1.00 23.05           N
ATOM   1346  CA  ALA A 177      53.346  69.309  25.009  1.00 22.26           C
ATOM   1347  C   ALA A 177      51.981  70.009  24.984  1.00 22.66           C
ATOM   1348  O   ALA A 177      51.728  70.972  25.729  1.00 22.16           O
ATOM   1349  CB  ALA A 177      54.297  69.950  23.974  1.00 22.70           C
ATOM   1350  N   GLY A 178      51.104  69.529  24.100  1.00 22.74           N
ATOM   1351  CA  GLY A 178      49.768  70.090  23.995  1.00 22.93           C
ATOM   1352  C   GLY A 178      48.785  69.078  23.421  1.00 22.60           C
ATOM   1353  O   GLY A 178      49.193  68.099  22.787  1.00 23.07           O
ATOM   1354  N   SER A 179      47.495  69.305  23.632  1.00 22.71           N
ATOM   1355  CA  SER A 179      46.482  68.375  23.122  1.00 22.61           C
ATOM   1356  C   SER A 179      45.241  69.135  22.719  1.00 23.04           C
ATOM   1357  O   SER A 179      44.910  70.156  23.354  1.00 22.69           O
ATOM   1358  CB  SER A 179      46.138  67.348  24.196  1.00 21.98           C
ATOM   1359  OG  SER A 179      45.789  68.015  25.391  1.00 23.27           O
ATOM   1360  N   HIS A 180      44.551  68.643  21.681  1.00 23.14           N
ATOM   1361  CA  HIS A 180      43.338  69.310  21.218  1.00 23.02           C
ATOM   1362  C   HIS A 180      42.131  68.438  21.461  1.00 23.67           C
ATOM   1363  O   HIS A 180      42.239  67.190  21.450  1.00 23.31           O
ATOM   1364  CB  HIS A 180      43.455  69.767  19.740  1.00 23.22           C
ATOM   1365  CG  HIS A 180      43.609  68.672  18.713  1.00 22.55           C
ATOM   1366  ND1 HIS A 180      42.546  67.912  18.271  1.00 22.61           N
ATOM   1367  CD2 HIS A 180      44.636  68.385  17.877  1.00 23.05           C
ATOM   1368  CE1 HIS A 180      42.902  67.226  17.193  1.00 22.16           C
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ATOM   1369  NE2 HIS A 180     44.166  67.494  16.930  1.00 23.61          N
ATOM   1370  N   TRP A 181     41.002  69.106  21.713  1.00 23.21          N
ATOM   1371  CA  TRP A 181     39.748  68.465  22.112  1.00 23.07          C
ATOM   1372  C   TRP A 181     38.625  69.106  21.322  1.00 23.60          C
ATOM   1373  O   TRP A 181     38.572  70.348  21.260  1.00 23.43          O
ATOM   1374  CB  TRP A 181     39.559  68.710  23.616  1.00 21.24          C
ATOM   1375  CG  TRP A 181     40.801  68.293  24.388  1.00 22.61          C
ATOM   1376  CD1 TRP A 181     41.942  69.044  24.604  1.00 21.86          C
ATOM   1377  CD2 TRP A 181     41.087  66.985  24.911  1.00 22.10          C
ATOM   1378  NE1 TRP A 181     42.907  68.278  25.219  1.00 22.72          N
ATOM   1379  CE2 TRP A 181     42.413  67.013  25.422  1.00 22.77          C
ATOM   1380  CE3 TRP A 181     40.354  65.785  24.985  1.00 23.36          C
ATOM   1381  CZ2 TRP A 181     43.028  65.885  26.007  1.00 22.58          C
ATOM   1382  CZ3 TRP A 181     40.967  64.656  25.565  1.00 22.55          C
ATOM   1383  CH2 TRP A 181     42.291  64.716  26.070  1.00 22.46          C
ATOM   1384  N   GLU A 182     37.734  68.290  20.743  1.00 22.93          N
ATOM   1385  CA  GLU A 182     36.658  68.814  19.895  1.00 23.56          C
ATOM   1386  C   GLU A 182     35.266  68.529  20.457  1.00 23.75          C
ATOM   1387  O   GLU A 182     35.080  67.631  21.305  1.00 22.83          O
ATOM   1388  CB  GLU A 182     36.796  68.252  18.459  1.00 23.46          C
ATOM   1389  CG  GLU A 182     36.561  66.729  18.378  1.00 23.89          C
ATOM   1390  CD  GLU A 182     37.173  66.138  17.142  1.00 25.13          C
ATOM   1391  OE1 GLU A 182     38.382  66.417  16.894  1.00 23.65          O
ATOM   1392  OE2 GLU A 182     36.446  65.396  16.423  1.00 25.43          O
ATOM   1393  N   ASP A 183     34.301  69.322  19.979  1.00 24.08          N
ATOM   1394  CA  ASP A 183     32.931  69.293  20.480  1.00 23.93          C
ATOM   1395  C   ASP A 183     31.900  68.472  19.715  1.00 24.28          C
ATOM   1396  O   ASP A 183     30.727  68.883  19.563  1.00 24.07          O
ATOM   1397  CB  ASP A 183     32.430  70.745  20.633  1.00 23.17          C
ATOM   1398  CG  ASP A 183     32.517  71.538  19.321  1.00 24.54          C
ATOM   1399  OD1 ASP A 183     32.855  70.941  18.245  1.00 23.69          O
ATOM   1400  OD2 ASP A 183     32.246  72.762  19.377  1.00 23.59          O
ATOM   1401  N   GLN A 184     32.305  67.311  19.224  1.00 24.79          N
ATOM   1402  CA  GLN A 184     31.355  66.456  18.519  1.00 25.55          C
ATOM   1403  C   GLN A 184     31.286  65.057  19.138  1.00 26.77          C
ATOM   1404  O   GLN A 184     32.153  64.676  19.954  1.00 26.15          O
ATOM   1405  CB  GLN A 184     31.751  66.329  17.036  1.00 25.39          C
ATOM   1406  CG  GLN A 184     32.931  65.422  16.773  1.00 25.55          C
ATOM   1407  CD  GLN A 184     33.073  65.082  15.285  1.00 25.92          C
ATOM   1408  OE1 GLN A 184     32.155  64.510  14.687  1.00 25.04          O
ATOM   1409  NE2 GLN A 184     34.211  65.449  14.682  1.00 24.92          N
ATOM   1410  N   LEU A 185     30.262  64.289  18.747  1.00 27.53          N
ATOM   1411  CA  LEU A 185     30.128  62.898  19.203  1.00 28.47          C
ATOM   1412  C   LEU A 185     30.314  62.076  17.898  1.00 28.83          C
ATOM   1413  O   LEU A 185     29.337  61.722  17.208  1.00 27.56          O
ATOM   1414  CB  LEU A 185     28.741  62.666  19.809  1.00 28.28          C
ATOM   1415  CG  LEU A 185     28.426  61.239  20.286  1.00 28.54          C
ATOM   1416  CD1 LEU A 185     29.491  60.748  21.307  1.00 29.61          C
ATOM   1417  CD2 LEU A 185     27.021  61.227  20.892  1.00 29.07          C
ATOM   1418  N   ALA A 186     31.577  61.838  17.531  1.00 29.18          N
ATOM   1419  CA  ALA A 186     31.883  61.114  16.292  1.00 30.31          C
ATOM   1420  C   ALA A 186     31.176  59.762  16.189  1.00 31.71          C
ATOM   1421  O   ALA A 186     30.716  59.392  15.106  1.00 32.46          O
ATOM   1422  CB  ALA A 186     33.415  60.935  16.136  1.00 29.94          C
ATOM   1423  N   SER A 187     31.048  59.034  17.301  1.00 32.25          N
ATOM   1424  CA  SER A 187     30.409  57.720  17.243  1.00 33.62          C
ATOM   1425  C   SER A 187     28.933  57.734  16.834  1.00 33.77          C
ATOM   1426  O   SER A 187     28.334  56.681  16.659  1.00 33.60          O
ATOM   1427  CB  SER A 187     30.560  56.976  18.568  1.00 33.43          C
ATOM   1428  OG  SER A 187     30.053  57.710  19.676  1.00 34.19          O
ATOM   1429  N   GLU A 188     28.342  58.910  16.685  1.00 33.93          N
ATOM   1430  CA  GLU A 188     26.945  58.970  16.281  1.00 34.97          C
ATOM   1431  C   GLU A 188     26.810  59.719  14.954  1.00 35.56          C
ATOM   1432  O   GLU A 188     25.708  60.071  14.552  1.00 34.31          O
ATOM   1433  CB  GLU A 188     26.063  59.647  17.343  1.00 35.56          C
ATOM   1434  CG  GLU A 188     25.868  58.868  18.671  1.00 36.05          C
ATOM   1435  CD  GLU A 188     25.256  57.468  18.494  1.00 37.21          C
ATOM   1436  OE1 GLU A 188     24.418  57.258  17.579  1.00 38.43          O
ATOM   1437  OE2 GLU A 188     25.612  56.571  19.285  1.00 37.67          O
ATOM   1438  N   LYS A 189     27.930  59.958  14.282  1.00 37.00          N
ATOM   1439  CA  LYS A 189     27.903  60.625  12.987  1.00 40.03          C
ATOM   1440  C   LYS A 189     26.920  59.882  12.058  1.00 41.68          C
ATOM   1441  O   LYS A 189     26.985  58.655  11.906  1.00 40.82          O
ATOM   1442  CB  LYS A 189     29.294  60.631  12.356  1.00 40.48          C
ATOM   1443  CG  LYS A 189     29.328  61.446  11.053  1.00 42.79          C
ATOM   1444  CD  LYS A 189     30.752  61.612  10.505  1.00 44.36          C
ATOM   1445  CE  LYS A 189     31.298  60.298   9.932  1.00 45.27          C
ATOM   1446  NZ  LYS A 189     30.588  59.904   8.654  1.00 46.03          N
ATOM   1447  N   LYS A 190     25.999  60.627  11.467  1.00 44.25          N
ATOM   1448  CA  LYS A 190     25.016  60.035  10.580  1.00 47.60          C
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ATOM   1449  C    LYS A 190     25.460  60.071   9.120  1.00 49.42        C
ATOM   1450  O    LYS A 190     25.857  61.116   8.604  1.00 48.83        O
ATOM   1451  CB   LYS A 190     23.665  60.741  10.739  1.00 47.98        C
ATOM   1452  CG   LYS A 190     23.031  60.506  12.105  1.00 50.13        C
ATOM   1453  CD   LYS A 190     22.602  59.035  12.280  1.00 50.27        C
ATOM   1454  CE   LYS A 190     22.280  58.667  13.767  1.00 51.10        C
ATOM   1455  NZ   LYS A 190     23.448  58.363  14.695  1.00 49.91        N
ATOM   1456  N    CYS A 191     25.397  58.908   8.469  1.00 51.84        N
ATOM   1457  CA   CYS A 191     25.764  58.779   7.059  1.00 54.66        C
ATOM   1458  C    CYS A 191     24.621  59.177   6.136  1.00 55.22        C
ATOM   1459  O    CYS A 191     23.439  59.119   6.497  1.00 55.51        O
ATOM   1460  CB   CYS A 191     26.132  57.331   6.704  1.00 55.79        C
ATOM   1461  SG   CYS A 191     27.316  56.578   7.802  1.00 59.63        S
ATOM   1462  N    GLY A 192     25.011  59.576   4.937  1.00 56.06        N
ATOM   1463  CA   GLY A 192     24.065  59.925   3.902  1.00 56.81        C
ATOM   1464  C    GLY A 192     23.182  61.134   4.055  1.00 57.07        C
ATOM   1465  O    GLY A 192     23.401  61.997   4.907  1.00 57.04        O
ATOM   1466  N    HIS A 193     22.168  61.159   3.192  1.00 56.94        N
ATOM   1467  CA   HIS A 193     21.187  62.221   3.123  1.00 56.54        C
ATOM   1468  C    HIS A 193     20.686  62.713   4.482  1.00 55.13        C
ATOM   1469  O    HIS A 193     20.197  61.936   5.307  1.00 54.55        O
ATOM   1470  CB   HIS A 193     20.015  61.761   2.258  1.00 57.86        C
ATOM   1471  CG   HIS A 193     18.999  62.831   2.017  1.00 59.51        C
ATOM   1472  ND1  HIS A 193     19.347  64.116   1.656  1.00 60.00        N
ATOM   1473  CD2  HIS A 193     17.647  62.816   2.108  1.00 60.06        C
ATOM   1474  CE1  HIS A 193     18.252  64.848   1.540  1.00 60.56        C
ATOM   1475  NE2  HIS A 193     17.208  64.084   1.808  1.00 60.65        N
ATOM   1476  N    LEU A 194     20.824  64.019   4.689  1.00 53.58        N
ATOM   1477  CA   LEU A 194     20.417  64.695   5.920  1.00 52.35        C
ATOM   1478  C    LEU A 194     21.203  64.263   7.176  1.00 50.79        C
ATOM   1479  O    LEU A 194     20.790  64.550   8.300  1.00 50.36        O
ATOM   1480  CB   LEU A 194     18.907  64.520   6.143  1.00 52.78        C
ATOM   1481  CG   LEU A 194     17.986  65.241   5.148  1.00 53.42        C
ATOM   1482  CD1  LEU A 194     16.545  64.869   5.412  1.00 53.13        C
ATOM   1483  CD2  LEU A 194     18.165  66.740   5.282  1.00 53.74        C
ATOM   1484  N    GLY A 195     22.329  63.582   6.971  1.00 48.66        N
ATOM   1485  CA   GLY A 195     23.161  63.151   8.082  1.00 46.34        C
ATOM   1486  C    GLY A 195     24.206  64.211   8.408  1.00 44.37        C
ATOM   1487  O    GLY A 195     23.960  65.408   8.197  1.00 44.15        O
ATOM   1488  N    GLY A 196     25.364  63.777   8.913  1.00 41.54        N
ATOM   1489  CA   GLY A 196     26.437  64.699   9.257  1.00 38.39        C
ATOM   1490  C    GLY A 196     26.950  64.524  10.691  1.00 36.04        C
ATOM   1491  O    GLY A 196     26.463  63.664  11.434  1.00 35.85        O
ATOM   1492  N    LYS A 197     27.933  65.337  11.071  1.00 32.88        N
ATOM   1493  CA   LYS A 197     28.514  65.298  12.409  1.00 30.16        C
ATOM   1494  C    LYS A 197     27.474  65.795  13.443  1.00 28.55        C
ATOM   1495  O    LYS A 197     26.571  66.598  13.125  1.00 27.37        O
ATOM   1496  CB   LYS A 197     29.772  66.174  12.464  1.00 28.98        C
ATOM   1497  CG   LYS A 197     30.922  65.667  11.594  1.00 27.32        C
ATOM   1498  CD   LYS A 197     32.176  66.536  11.747  1.00 27.75        C
ATOM   1499  CE   LYS A 197     31.959  67.984  11.294  1.00 27.37        C
ATOM   1500  NZ   LYS A 197     33.202  68.854  11.359  1.00 26.12        N
ATOM   1501  N    VAL A 198     27.599  65.286  14.663  1.00 27.12        N
ATOM   1502  CA   VAL A 198     26.705  65.637  15.768  1.00 26.35        C
ATOM   1503  C    VAL A 198     27.502  66.380  16.846  1.00 26.39        C
ATOM   1504  O    VAL A 198     28.473  65.847  17.405  1.00 25.73        O
ATOM   1505  CB   VAL A 198     26.102  64.388  16.418  1.00 25.98        C
ATOM   1506  CG1  VAL A 198     25.118  64.806  17.553  1.00 25.25        C
ATOM   1507  CG2  VAL A 198     25.376  63.520  15.335  1.00 25.23        C
ATOM   1508  N    LEU A 199     27.115  67.614  17.130  1.00 25.66        N
ATOM   1509  CA   LEU A 199     27.800  68.362  18.173  1.00 25.61        C
ATOM   1510  C    LEU A 199     27.272  67.999  19.553  1.00 25.63        C
ATOM   1511  O    LEU A 199     26.187  67.375  19.694  1.00 24.84        O
ATOM   1512  CB   LEU A 199     27.570  69.856  17.984  1.00 25.73        C
ATOM   1513  CG   LEU A 199     28.027  70.518  16.686  1.00 26.02        C
ATOM   1514  CD1  LEU A 199     27.651  72.007  16.727  1.00 26.05        C
ATOM   1515  CD2  LEU A 199     29.528  70.345  16.529  1.00 25.10        C
ATOM   1516  N    ILE A 200     28.051  68.350  20.584  1.00 25.63        N
ATOM   1517  CA   ILE A 200     27.548  68.182  21.942  1.00 25.57        C
ATOM   1518  C    ILE A 200     27.296  69.629  22.424  1.00 25.69        C
ATOM   1519  O    ILE A 200     27.741  70.609  21.781  1.00 25.05        O
ATOM   1520  CB   ILE A 200     28.512  67.392  22.884  1.00 26.38        C
ATOM   1521  CG1  ILE A 200     29.996  67.689  22.587  1.00 27.87        C
ATOM   1522  CG2  ILE A 200     28.324  65.886  22.633  1.00 26.42        C
ATOM   1523  CD1  ILE A 200     30.560  68.968  23.161  1.00 27.65        C
ATOM   1524  N    PRO A 201     26.584  69.794  23.542  1.00 25.32        N
ATOM   1525  CA   PRO A 201     26.309  71.155  24.037  1.00 25.07        C
ATOM   1526  C    PRO A 201     27.554  71.964  24.384  1.00 25.60        C
ATOM   1527  O    PRO A 201     28.573  71.400  24.797  1.00 25.39        O
ATOM   1528  CB   PRO A 201     25.456  70.908  25.275  1.00 24.54        C
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ATOM   1529  CG   PRO A 201      24.732  69.587  24.945  1.00 25.65           C
ATOM   1530  CD   PRO A 201      25.887  68.774  24.349  1.00 24.88           C
ATOM   1531  N    THR A 202      27.465  73.292  24.262  1.00 25.84           N
ATOM   1532  CA   THR A 202      28.603  74.138  24.608  1.00 26.08           C
ATOM   1533  C    THR A 202      29.118  73.828  26.028  1.00 26.54           C
ATOM   1534  O    THR A 202      30.333  73.709  26.246  1.00 25.96           O
ATOM   1535  CB   THR A 202      28.219  75.644  24.490  1.00 26.26           C
ATOM   1536  OG1  THR A 202      27.996  75.953  23.101  1.00 25.32           O
ATOM   1537  CG2  THR A 202      29.366  76.549  25.018  1.00 25.85           C
ATOM   1538  N    GLN A 203      28.211  73.661  26.992  1.00 26.60           N
ATOM   1539  CA   GLN A 203      28.657  73.380  28.352  1.00 28.00           C
ATOM   1540  C    GLN A 203      29.399  72.034  28.472  1.00 26.68           C
ATOM   1541  O    GLN A 203      30.324  71.883  29.281  1.00 26.25           O
ATOM   1542  CB   GLN A 203      27.483  73.402  29.338  1.00 30.03           C
ATOM   1543  CG   GLN A 203      27.950  73.319  30.801  1.00 32.75           C
ATOM   1544  CD   GLN A 203      28.901  74.478  31.212  1.00 34.94           C
ATOM   1545  OE1  GLN A 203      28.743  75.636  30.778  1.00 35.21           O
ATOM   1546  NE2  GLN A 203      29.879  74.162  32.080  1.00 35.95           N
ATOM   1547  N    GLN A 204      29.006  71.058  27.670  1.00 25.79           N
ATOM   1548  CA   GLN A 204      29.701  69.769  27.741  1.00 25.36           C
ATOM   1549  C    GLN A 204      31.131  69.940  27.222  1.00 25.21           C
ATOM   1550  O    GLN A 204      32.049  69.316  27.731  1.00 25.87           O
ATOM   1551  CB   GLN A 204      28.992  68.683  26.919  1.00 25.74           C
ATOM   1552  CG   GLN A 204      29.716  67.289  27.027  1.00 27.00           C
ATOM   1553  CD   GLN A 204      28.850  66.140  26.470  1.00 27.97           C
ATOM   1554  OE1  GLN A 204      27.620  66.179  26.553  1.00 27.38           O
ATOM   1555  NE2  GLN A 204      29.498  65.133  25.904  1.00 27.66           N
ATOM   1556  N    HIS A 205      31.340  70.758  26.201  1.00 24.29           N
ATOM   1557  CA   HIS A 205      32.710  70.933  25.742  1.00 24.59           C
ATOM   1558  C    HIS A 205      33.562  71.701  26.756  1.00 25.10           C
ATOM   1559  O    HIS A 205      34.769  71.467  26.858  1.00 25.13           O
ATOM   1560  CB   HIS A 205      32.792  71.617  24.377  1.00 24.34           C
ATOM   1561  CG   HIS A 205      34.099  71.364  23.707  1.00 24.83           C
ATOM   1562  ND1  HIS A 205      34.645  70.096  23.635  1.00 24.76           N
ATOM   1563  CD2  HIS A 205      35.024  72.205  23.187  1.00 24.66           C
ATOM   1564  CE1  HIS A 205      35.851  70.167  23.103  1.00 24.05           C
ATOM   1565  NE2  HIS A 205      36.108  71.435  22.823  1.00 25.06           N
ATOM   1566  N    ILE A 206      32.938  72.627  27.496  1.00 24.93           N
ATOM   1567  CA   ILE A 206      33.653  73.362  28.546  1.00 24.36           C
ATOM   1568  C    ILE A 206      34.024  72.333  29.619  1.00 23.76           C
ATOM   1569  O    ILE A 206      35.102  72.404  30.215  1.00 24.41           O
ATOM   1570  CB   ILE A 206      32.763  74.493  29.138  1.00 24.27           C
ATOM   1571  CG1  ILE A 206      32.650  75.612  28.091  1.00 24.96           C
ATOM   1572  CG2  ILE A 206      33.341  74.977  30.479  1.00 24.58           C
ATOM   1573  CD1  ILE A 206      31.666  76.765  28.457  1.00 25.95           C
ATOM   1574  N    ARG A 207      33.137  71.381  29.890  1.00 23.17           N
ATOM   1575  CA   ARG A 207      33.467  70.301  30.836  1.00 23.57           C
ATOM   1576  C    ARG A 207      34.708  69.559  30.307  1.00 23.63           C
ATOM   1577  O    ARG A 207      35.664  69.272  31.064  1.00 24.01           O
ATOM   1578  CB   ARG A 207      32.291  69.311  30.955  1.00 24.08           C
ATOM   1579  CG   ARG A 207      32.471  68.196  31.983  1.00 24.95           C
ATOM   1580  CD   ARG A 207      31.277  67.180  31.929  1.00 25.51           C
ATOM   1581  NE   ARG A 207      31.411  66.321  30.738  1.00 26.42           N
ATOM   1582  CZ   ARG A 207      30.491  65.441  30.346  1.00 27.31           C
ATOM   1583  NH1  ARG A 207      29.363  65.299  31.047  1.00 26.12           N
ATOM   1584  NH2  ARG A 207      30.701  64.693  29.263  1.00 26.93           N
ATOM   1585  N    THR A 208      34.703  69.225  29.011  1.00 23.32           N
ATOM   1586  CA   THR A 208      35.868  68.539  28.433  1.00 22.60           C
ATOM   1587  C    THR A 208      37.169  69.341  28.631  1.00 22.18           C
ATOM   1588  O    THR A 208      38.193  68.810  29.115  1.00 20.41           O
ATOM   1589  CB   THR A 208      35.668  68.258  26.927  1.00 22.44           C
ATOM   1590  OG1  THR A 208      34.645  67.244  26.765  1.00 22.26           O
ATOM   1591  CG2  THR A 208      36.981  67.769  26.298  1.00 21.85           C
ATOM   1592  N    LEU A 209      37.126  70.619  28.262  1.00 22.17           N
ATOM   1593  CA   LEU A 209      38.310  71.477  28.384  1.00 23.01           C
ATOM   1594  C    LEU A 209      38.730  71.631  29.853  1.00 22.52           C
ATOM   1595  O    LEU A 209      39.918  71.690  30.173  1.00 22.89           O
ATOM   1596  CB   LEU A 209      38.021  72.859  27.751  1.00 22.35           C
ATOM   1597  CG   LEU A 209      37.692  72.819  26.243  1.00 22.69           C
ATOM   1598  CD1  LEU A 209      37.173  74.203  25.732  1.00 20.91           C
ATOM   1599  CD2  LEU A 209      38.920  72.383  25.486  1.00 21.71           C
ATOM   1600  N    THR A 210      37.757  71.671  30.744  1.00 23.14           N
ATOM   1601  CA   THR A 210      38.044  71.838  32.172  1.00 23.82           C
ATOM   1602  C    THR A 210      38.694  70.554  32.696  1.00 24.17           C
ATOM   1603  O    THR A 210      39.635  70.599  33.493  1.00 23.45           O
ATOM   1604  CB   THR A 210      36.739  72.185  32.945  1.00 24.12           C
ATOM   1605  OG1  THR A 210      36.277  73.488  32.524  1.00 24.45           O
ATOM   1606  CG2  THR A 210      36.984  72.209  34.478  1.00 24.01           C
ATOM   1607  N    SER A 211      38.185  69.407  32.232  1.00 23.57           N
ATOM   1608  CA   SER A 211      38.751  68.125  32.613  1.00 23.83           C
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| ATOM | 1609 | C | SER A 211 | 40.184 | 67.968 | 32.050 | 1.00 | 23.85 | C |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1610 | O | SER A 211 | 41.048 | 67.433 | 32.732 | 1.00 | 23.69 | O |
| ATOM | 1611 | CB | SER A 211 | 37.852 | 66.973 | 32.136 | 1.00 | 24.75 | C |
| ATOM | 1612 | OG | SER A 211 | 38.490 | 65.712 | 32.404 | 1.00 | 26.60 | O |
| ATOM | 1613 | N | ALA A 212 | 40.449 | 68.400 | 30.812 | 1.00 | 24.13 | N |
| ATOM | 1614 | CA | ALA A 212 | 41.826 | 68.312 | 30.277 | 1.00 | 24.15 | C |
| ATOM | 1615 | C | ALA A 212 | 42.805 | 69.206 | 31.094 | 1.00 | 23.88 | C |
| ATOM | 1616 | O | ALA A 212 | 43.943 | 68.833 | 31.338 | 1.00 | 24.18 | O |
| ATOM | 1617 | CB | ALA A 212 | 41.856 | 68.729 | 28.813 | 1.00 | 24.56 | C |
| ATOM | 1618 | N | ARG A 213 | 42.350 | 70.388 | 31.492 | 1.00 | 23.68 | N |
| ATOM | 1619 | CA | ARG A 213 | 43.165 | 71.302 | 32.290 | 1.00 | 23.39 | C |
| ATOM | 1620 | C | ARG A 213 | 43.377 | 70.706 | 33.677 | 1.00 | 22.89 | C |
| ATOM | 1621 | O | ARG A 213 | 44.488 | 70.745 | 34.202 | 1.00 | 22.97 | O |
| ATOM | 1622 | CB | ARG A 213 | 42.469 | 72.682 | 32.447 | 1.00 | 23.42 | C |
| ATOM | 1623 | CG | ARG A 213 | 43.358 | 73.683 | 33.217 | 1.00 | 22.86 | C |
| ATOM | 1624 | CD | ARG A 213 | 44.465 | 74.262 | 32.320 | 1.00 | 23.84 | C |
| ATOM | 1625 | NE | ARG A 213 | 43.931 | 75.242 | 31.357 | 1.00 | 25.14 | N |
| ATOM | 1626 | CZ | ARG A 213 | 44.593 | 75.646 | 30.268 | 1.00 | 26.92 | C |
| ATOM | 1627 | NH1 | ARG A 213 | 45.803 | 75.149 | 30.016 | 1.00 | 25.44 | N |
| ATOM | 1628 | NH2 | ARG A 213 | 44.041 | 76.531 | 29.415 | 1.00 | 26.58 | N |
| ATOM | 1629 | N | LEU A 214 | 42.312 | 70.168 | 34.282 | 1.00 | 22.50 | N |
| ATOM | 1630 | CA | LEU A 214 | 42.440 | 69.544 | 35.594 | 1.00 | 22.90 | C |
| ATOM | 1631 | C | LEU A 214 | 43.502 | 68.408 | 35.580 | 1.00 | 23.72 | C |
| ATOM | 1632 | O | LEU A 214 | 44.351 | 68.305 | 36.487 | 1.00 | 23.53 | O |
| ATOM | 1633 | CB | LEU A 214 | 41.096 | 68.963 | 36.083 | 1.00 | 22.70 | C |
| ATOM | 1634 | CG | LEU A 214 | 41.169 | 68.232 | 37.454 | 1.00 | 22.73 | C |
| ATOM | 1635 | CD1 | LEU A 214 | 41.581 | 69.270 | 38.549 | 1.00 | 23.24 | C |
| ATOM | 1636 | CD2 | LEU A 214 | 39.831 | 67.596 | 37.822 | 1.00 | 22.50 | C |
| ATOM | 1637 | N | ALA A 215 | 43.439 | 67.524 | 34.579 | 1.00 | 22.72 | N |
| ATOM | 1638 | CA | ALA A 215 | 44.419 | 66.420 | 34.518 | 1.00 | 21.86 | C |
| ATOM | 1639 | C | ALA A 215 | 45.853 | 67.004 | 34.401 | 1.00 | 22.27 | C |
| ATOM | 1640 | O | ALA A 215 | 46.806 | 66.480 | 34.983 | 1.00 | 21.39 | O |
| ATOM | 1641 | CB | ALA A 215 | 44.102 | 65.504 | 33.288 | 1.00 | 21.23 | C |
| ATOM | 1642 | N | ALA A 216 | 46.013 | 68.080 | 33.622 | 1.00 | 22.16 | N |
| ATOM | 1643 | CA | ALA A 216 | 47.342 | 68.707 | 33.470 | 1.00 | 22.44 | C |
| ATOM | 1644 | C | ALA A 216 | 47.793 | 69.304 | 34.829 | 1.00 | 22.66 | C |
| ATOM | 1645 | O | ALA A 216 | 48.969 | 69.165 | 35.238 | 1.00 | 23.56 | O |
| ATOM | 1646 | CB | ALA A 216 | 47.285 | 69.820 | 32.370 | 1.00 | 21.90 | C |
| ATOM | 1647 | N | ASP A 217 | 46.860 | 69.929 | 35.539 | 1.00 | 22.15 | N |
| ATOM | 1648 | CA | ASP A 217 | 47.165 | 70.509 | 36.841 | 1.00 | 23.42 | C |
| ATOM | 1649 | C | ASP A 217 | 47.505 | 69.412 | 37.850 | 1.00 | 23.55 | C |
| ATOM | 1650 | O | ASP A 217 | 48.465 | 69.539 | 38.623 | 1.00 | 22.90 | O |
| ATOM | 1651 | CB | ASP A 217 | 45.985 | 71.355 | 37.366 | 1.00 | 23.44 | C |
| ATOM | 1652 | CG | ASP A 217 | 45.854 | 72.691 | 36.650 | 1.00 | 23.96 | C |
| ATOM | 1653 | OD1 | ASP A 217 | 46.844 | 73.133 | 36.010 | 1.00 | 24.12 | O |
| ATOM | 1654 | OD2 | ASP A 217 | 44.762 | 73.305 | 36.748 | 1.00 | 23.59 | O |
| ATOM | 1655 | N | VAL A 218 | 46.729 | 68.331 | 37.865 | 1.00 | 23.56 | N |
| ATOM | 1656 | CA | VAL A 218 | 47.054 | 67.258 | 38.804 | 1.00 | 22.98 | C |
| ATOM | 1657 | C | VAL A 218 | 48.438 | 66.650 | 38.507 | 1.00 | 23.38 | C |
| ATOM | 1658 | O | VAL A 218 | 49.188 | 66.278 | 39.435 | 1.00 | 22.65 | O |
| ATOM | 1659 | CB | VAL A 218 | 45.954 | 66.163 | 38.809 | 1.00 | 23.24 | C |
| ATOM | 1660 | CG1 | VAL A 218 | 46.406 | 64.937 | 39.632 | 1.00 | 22.35 | C |
| ATOM | 1661 | CG2 | VAL A 218 | 44.666 | 66.729 | 39.401 | 1.00 | 22.07 | C |
| ATOM | 1662 | N | ALA A 219 | 48.777 | 66.568 | 37.223 | 1.00 | 23.12 | N |
| ATOM | 1663 | CA | ALA A 219 | 50.050 | 66.031 | 36.789 | 1.00 | 23.72 | C |
| ATOM | 1664 | C | ALA A 219 | 51.151 | 67.085 | 36.900 | 1.00 | 24.56 | C |
| ATOM | 1665 | O | ALA A 219 | 52.287 | 66.825 | 36.551 | 1.00 | 25.81 | O |
| ATOM | 1666 | CB | ALA A 219 | 49.956 | 65.517 | 35.330 | 1.00 | 23.14 | C |
| ATOM | 1667 | N | ASP A 220 | 50.800 | 68.288 | 37.353 | 1.00 | 25.57 | N |
| ATOM | 1668 | CA | ASP A 220 | 51.773 | 69.377 | 37.566 | 1.00 | 25.81 | C |
| ATOM | 1669 | C | ASP A 220 | 52.571 | 69.814 | 36.330 | 1.00 | 25.14 | C |
| ATOM | 1670 | O | ASP A 220 | 53.779 | 70.058 | 36.421 | 1.00 | 25.19 | O |
| ATOM | 1671 | CB | ASP A 220 | 52.720 | 68.975 | 38.728 | 1.00 | 25.97 | C |
| ATOM | 1672 | CG | ASP A 220 | 53.609 | 70.149 | 39.245 | 1.00 | 27.49 | C |
| ATOM | 1673 | OD1 | ASP A 220 | 53.171 | 71.321 | 39.274 | 1.00 | 25.83 | O |
| ATOM | 1674 | OD2 | ASP A 220 | 54.760 | 69.852 | 39.632 | 1.00 | 27.65 | O |
| ATOM | 1675 | N | VAL A 221 | 51.924 | 69.909 | 35.171 | 1.00 | 23.83 | N |
| ATOM | 1676 | CA | VAL A 221 | 52.630 | 70.359 | 33.974 | 1.00 | 23.88 | C |
| ATOM | 1677 | C | VAL A 221 | 51.743 | 71.379 | 33.293 | 1.00 | 24.21 | C |
| ATOM | 1678 | O | VAL A 221 | 50.521 | 71.267 | 33.334 | 1.00 | 24.58 | O |
| ATOM | 1679 | CB | VAL A 221 | 52.968 | 69.211 | 33.003 | 1.00 | 24.82 | C |
| ATOM | 1680 | CG1 | VAL A 221 | 54.053 | 68.314 | 33.617 | 1.00 | 24.66 | C |
| ATOM | 1681 | CG2 | VAL A 221 | 51.705 | 68.377 | 32.699 | 1.00 | 23.85 | C |
| ATOM | 1682 | N | PRO A 222 | 52.346 | 72.384 | 32.624 | 1.00 | 25.15 | N |
| ATOM | 1683 | CA | PRO A 222 | 51.582 | 73.444 | 31.944 | 1.00 | 24.50 | C |
| ATOM | 1684 | C | PRO A 222 | 51.158 | 73.121 | 30.505 | 1.00 | 24.25 | C |
| ATOM | 1685 | O | PRO A 222 | 51.358 | 73.930 | 29.571 | 1.00 | 22.92 | O |
| ATOM | 1686 | CB | PRO A 222 | 52.539 | 74.629 | 32.020 | 1.00 | 25.35 | C |
| ATOM | 1687 | CG | PRO A 222 | 53.907 | 73.978 | 31.781 | 1.00 | 24.39 | C |
| ATOM | 1688 | CD | PRO A 222 | 53.808 | 72.633 | 32.547 | 1.00 | 25.31 | C |

| ATOM | 1689 | N | THR | A | 223 | 50.556 | 71.944 | 30.337 | 1.00 | 23.56 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1690 | CA | THR | A | 223 | 50.155 | 71.486 | 29.007 | 1.00 | 22.91 | C |
| ATOM | 1691 | C | THR | A | 223 | 49.384 | 72.522 | 28.216 | 1.00 | 22.81 | C |
| ATOM | 1692 | O | THR | A | 223 | 48.529 | 73.181 | 28.783 | 1.00 | 23.60 | O |
| ATOM | 1693 | CB | THR | A | 223 | 49.289 | 70.221 | 29.155 | 1.00 | 22.30 | C |
| ATOM | 1694 | OG1 | THR | A | 223 | 50.005 | 69.301 | 29.976 | 1.00 | 20.38 | O |
| ATOM | 1695 | CG2 | THR | A | 223 | 49.017 | 69.584 | 27.779 | 1.00 | 22.04 | C |
| ATOM | 1696 | N | VAL | A | 224 | 49.658 | 72.667 | 26.919 | 1.00 | 23.12 | N |
| ATOM | 1697 | CA | VAL | A | 224 | 48.904 | 73.624 | 26.100 | 1.00 | 23.78 | C |
| ATOM | 1698 | C | VAL | A | 224 | 47.561 | 72.940 | 25.730 | 1.00 | 24.49 | C |
| ATOM | 1699 | O | VAL | A | 224 | 47.549 | 71.843 | 25.176 | 1.00 | 24.80 | O |
| ATOM | 1700 | CB | VAL | A | 224 | 49.706 | 74.013 | 24.818 | 1.00 | 24.14 | C |
| ATOM | 1701 | CG1 | VAL | A | 224 | 48.885 | 74.917 | 23.916 | 1.00 | 24.20 | C |
| ATOM | 1702 | CG2 | VAL | A | 224 | 51.022 | 74.715 | 25.238 | 1.00 | 23.63 | C |
| ATOM | 1703 | N | VAL | A | 225 | 46.441 | 73.580 | 26.042 | 1.00 | 24.20 | N |
| ATOM | 1704 | CA | VAL | A | 225 | 45.120 | 73.002 | 25.767 | 1.00 | 24.45 | C |
| ATOM | 1705 | C | VAL | A | 225 | 44.483 | 73.720 | 24.596 | 1.00 | 25.05 | C |
| ATOM | 1706 | O | VAL | A | 225 | 44.334 | 74.959 | 24.625 | 1.00 | 25.37 | O |
| ATOM | 1707 | CB | VAL | A | 225 | 44.192 | 73.130 | 27.012 | 1.00 | 24.79 | C |
| ATOM | 1708 | CG1 | VAL | A | 225 | 42.772 | 72.695 | 26.673 | 1.00 | 24.80 | C |
| ATOM | 1709 | CG2 | VAL | A | 225 | 44.757 | 72.306 | 28.180 | 1.00 | 24.68 | C |
| ATOM | 1710 | N | ILE | A | 226 | 44.120 | 72.963 | 23.556 | 1.00 | 24.07 | N |
| ATOM | 1711 | CA | ILE | A | 226 | 43.521 | 73.533 | 22.360 | 1.00 | 24.19 | C |
| ATOM | 1712 | C | ILE | A | 226 | 42.078 | 73.084 | 22.222 | 1.00 | 24.57 | C |
| ATOM | 1713 | O | ILE | A | 226 | 41.793 | 71.886 | 22.380 | 1.00 | 24.14 | O |
| ATOM | 1714 | CB | ILE | A | 226 | 44.288 | 73.059 | 21.100 | 1.00 | 24.71 | C |
| ATOM | 1715 | CG1 | ILE | A | 226 | 45.772 | 73.430 | 21.244 | 1.00 | 24.67 | C |
| ATOM | 1716 | CG2 | ILE | A | 226 | 43.621 | 73.604 | 19.818 | 1.00 | 23.86 | C |
| ATOM | 1717 | CD1 | ILE | A | 226 | 46.609 | 72.997 | 20.106 | 1.00 | 24.65 | C |
| ATOM | 1718 | N | ALA | A | 227 | 41.179 | 74.023 | 21.916 | 1.00 | 23.50 | N |
| ATOM | 1719 | CA | ALA | A | 227 | 39.770 | 73.702 | 21.732 | 1.00 | 24.19 | C |
| ATOM | 1720 | C | ALA | A | 227 | 39.433 | 73.731 | 20.256 | 1.00 | 24.82 | C |
| ATOM | 1721 | O | ALA | A | 227 | 39.768 | 74.695 | 19.542 | 1.00 | 25.28 | O |
| ATOM | 1722 | CB | ALA | A | 227 | 38.860 | 74.713 | 22.493 | 1.00 | 24.28 | C |
| ATOM | 1723 | N | ARG | A | 228 | 38.785 | 72.675 | 19.767 | 1.00 | 23.92 | N |
| ATOM | 1724 | CA | ARG | A | 228 | 38.375 | 72.657 | 18.369 | 1.00 | 23.71 | C |
| ATOM | 1725 | C | ARG | A | 228 | 36.848 | 72.607 | 18.306 | 1.00 | 24.19 | C |
| ATOM | 1726 | O | ARG | A | 228 | 36.201 | 71.880 | 19.061 | 1.00 | 23.85 | O |
| ATOM | 1727 | CB | ARG | A | 228 | 38.942 | 71.417 | 17.650 | 1.00 | 23.92 | C |
| ATOM | 1728 | CG | ARG | A | 228 | 38.088 | 70.952 | 16.449 | 1.00 | 23.97 | C |
| ATOM | 1729 | CD | ARG | A | 228 | 38.754 | 69.793 | 15.654 | 1.00 | 23.56 | C |
| ATOM | 1730 | NE | ARG | A | 228 | 37.758 | 69.003 | 14.917 | 1.00 | 24.32 | N |
| ATOM | 1731 | CZ | ARG | A | 228 | 38.077 | 68.063 | 14.021 | 1.00 | 26.04 | C |
| ATOM | 1732 | NH1 | ARG | A | 228 | 39.371 | 67.796 | 13.769 | 1.00 | 24.76 | N |
| ATOM | 1733 | NH2 | ARG | A | 228 | 37.121 | 67.408 | 13.350 | 1.00 | 24.68 | N |
| ATOM | 1734 | N | THR | A | 229 | 36.266 | 73.385 | 17.411 | 1.00 | 23.92 | N |
| ATOM | 1735 | CA | THR | A | 229 | 34.844 | 73.317 | 17.243 | 1.00 | 24.56 | C |
| ATOM | 1736 | C | THR | A | 229 | 34.569 | 72.751 | 15.854 | 1.00 | 24.36 | C |
| ATOM | 1737 | O | THR | A | 229 | 35.254 | 73.086 | 14.887 | 1.00 | 24.57 | O |
| ATOM | 1738 | CB | THR | A | 229 | 34.154 | 74.688 | 17.388 | 1.00 | 25.26 | C |
| ATOM | 1739 | OG1 | THR | A | 229 | 32.731 | 74.494 | 17.293 | 1.00 | 24.97 | O |
| ATOM | 1740 | CG2 | THR | A | 229 | 34.646 | 75.680 | 16.326 | 1.00 | 23.91 | C |
| ATOM | 1741 | N | ASP | A | 230 | 33.583 | 71.875 | 15.776 | 1.00 | 24.70 | N |
| ATOM | 1742 | CA | ASP | A | 230 | 33.176 | 71.238 | 14.516 | 1.00 | 25.20 | C |
| ATOM | 1743 | C | ASP | A | 230 | 31.855 | 71.819 | 14.030 | 1.00 | 25.88 | C |
| ATOM | 1744 | O | ASP | A | 230 | 31.143 | 71.206 | 13.220 | 1.00 | 25.00 | O |
| ATOM | 1745 | CB | ASP | A | 230 | 33.028 | 69.723 | 14.729 | 1.00 | 24.69 | C |
| ATOM | 1746 | CG | ASP | A | 230 | 34.364 | 69.003 | 14.622 | 1.00 | 25.52 | C |
| ATOM | 1747 | OD1 | ASP | A | 230 | 35.111 | 68.883 | 15.637 | 1.00 | 24.97 | O |
| ATOM | 1748 | OD2 | ASP | A | 230 | 34.685 | 68.596 | 13.481 | 1.00 | 25.23 | O |
| ATOM | 1749 | N | ALA | A | 231 | 31.529 | 73.018 | 14.513 | 1.00 | 25.88 | N |
| ATOM | 1750 | CA | ALA | A | 231 | 30.244 | 73.601 | 14.155 | 1.00 | 27.36 | C |
| ATOM | 1751 | C | ALA | A | 231 | 30.137 | 74.156 | 12.722 | 1.00 | 27.88 | C |
| ATOM | 1752 | O | ALA | A | 231 | 29.028 | 74.494 | 12.268 | 1.00 | 28.63 | O |
| ATOM | 1753 | CB | ALA | A | 231 | 29.835 | 74.698 | 15.212 | 1.00 | 25.80 | C |
| ATOM | 1754 | N | GLU | A | 232 | 31.250 | 74.273 | 12.004 | 1.00 | 28.81 | N |
| ATOM | 1755 | CA | GLU | A | 232 | 31.129 | 74.792 | 10.644 | 1.00 | 30.19 | C |
| ATOM | 1756 | C | GLU | A | 232 | 30.256 | 73.890 | 9.775 | 1.00 | 30.27 | C |
| ATOM | 1757 | O | GLU | A | 232 | 29.386 | 74.380 | 9.063 | 1.00 | 29.94 | O |
| ATOM | 1758 | CB | GLU | A | 232 | 32.484 | 74.966 | 9.949 | 1.00 | 31.35 | C |
| ATOM | 1759 | CG | GLU | A | 232 | 32.358 | 75.656 | 8.583 | 1.00 | 34.89 | C |
| ATOM | 1760 | CD | GLU | A | 232 | 33.581 | 75.425 | 7.728 | 1.00 | 37.58 | C |
| ATOM | 1761 | OE1 | GLU | A | 232 | 33.806 | 74.285 | 7.268 | 1.00 | 38.16 | O |
| ATOM | 1762 | OE2 | GLU | A | 232 | 34.342 | 76.387 | 7.543 | 1.00 | 39.31 | O |
| ATOM | 1763 | N | ALA | A | 233 | 30.475 | 72.582 | 9.849 | 1.00 | 29.71 | N |
| ATOM | 1764 | CA | ALA | A | 233 | 29.718 | 71.624 | 9.038 | 1.00 | 29.60 | C |
| ATOM | 1765 | C | ALA | A | 233 | 28.667 | 70.782 | 9.791 | 1.00 | 30.03 | C |
| ATOM | 1766 | O | ALA | A | 233 | 27.703 | 70.287 | 9.179 | 1.00 | 30.05 | O |
| ATOM | 1767 | CB | ALA | A | 233 | 30.706 | 70.689 | 8.290 | 1.00 | 28.92 | C |
| ATOM | 1768 | N | ALA | A | 234 | 28.812 | 70.620 | 11.100 | 1.00 | 28.75 | N |

| ATOM | 1769 | CA | ALA A 234 | 27.847 | 69.789 | 11.831 | 1.00 29.23 | C |
| ATOM | 1770 | C | ALA A 234 | 26.403 | 70.285 | 11.660 | 1.00 29.22 | C |
| ATOM | 1771 | O | ALA A 234 | 26.118 | 71.480 | 11.789 | 1.00 29.74 | O |
| ATOM | 1772 | CB | ALA A 234 | 28.206 | 69.723 | 13.334 | 1.00 27.17 | C |
| ATOM | 1773 | N | THR A 235 | 25.490 | 69.346 | 11.449 | 1.00 29.48 | N |
| ATOM | 1774 | CA | THR A 235 | 24.085 | 69.676 | 11.217 | 1.00 30.00 | C |
| ATOM | 1775 | C | THR A 235 | 23.204 | 69.196 | 12.359 | 1.00 29.25 | C |
| ATOM | 1776 | O | THR A 235 | 22.004 | 69.425 | 12.358 | 1.00 27.82 | O |
| ATOM | 1777 | CB | THR A 235 | 23.602 | 68.970 | 9.940 | 1.00 31.09 | C |
| ATOM | 1778 | OG1 | THR A 235 | 23.769 | 67.555 | 10.128 | 1.00 33.53 | O |
| ATOM | 1779 | CG2 | THR A 235 | 24.456 | 69.386 | 8.743 | 1.00 32.10 | C |
| ATOM | 1780 | N | LEU A 236 | 23.812 | 68.525 | 13.339 | 1.00 28.43 | N |
| ATOM | 1781 | CA | LEU A 236 | 23.052 | 67.991 | 14.447 | 1.00 27.35 | C |
| ATOM | 1782 | C | LEU A 236 | 23.735 | 68.309 | 15.769 | 1.00 27.09 | C |
| ATOM | 1783 | O | LEU A 236 | 24.922 | 68.619 | 15.795 | 1.00 25.69 | O |
| ATOM | 1784 | CB | LEU A 236 | 22.947 | 66.490 | 14.283 | 1.00 27.66 | C |
| ATOM | 1785 | CG | LEU A 236 | 22.163 | 65.964 | 13.064 | 1.00 29.12 | C |
| ATOM | 1786 | CD1 | LEU A 236 | 22.464 | 64.437 | 12.878 | 1.00 28.48 | C |
| ATOM | 1787 | CD2 | LEU A 236 | 20.653 | 66.221 | 13.279 | 1.00 28.43 | C |
| ATOM | 1788 | N | ILE A 237 | 22.960 | 68.251 | 16.850 | 1.00 26.78 | N |
| ATOM | 1789 | CA | ILE A 237 | 23.493 | 68.471 | 18.198 | 1.00 27.04 | C |
| ATOM | 1790 | C | ILE A 237 | 22.686 | 67.533 | 19.105 | 1.00 27.02 | C |
| ATOM | 1791 | O | ILE A 237 | 21.472 | 67.316 | 18.884 | 1.00 26.58 | O |
| ATOM | 1792 | CB | ILE A 237 | 23.400 | 69.985 | 18.613 | 1.00 26.35 | C |
| ATOM | 1793 | CG1 | ILE A 237 | 24.123 | 70.220 | 19.943 | 1.00 26.21 | C |
| ATOM | 1794 | CG2 | ILE A 237 | 21.958 | 70.437 | 18.614 | 1.00 25.82 | C |
| ATOM | 1795 | CD1 | ILE A 237 | 24.218 | 71.715 | 20.370 | 1.00 25.32 | C |
| ATOM | 1796 | N | THR A 238 | 23.357 | 66.933 | 20.093 | 1.00 26.58 | N |
| ATOM | 1797 | CA | THR A 238 | 22.703 | 65.971 | 20.974 | 1.00 26.85 | C |
| ATOM | 1798 | C | THR A 238 | 21.558 | 66.525 | 21.792 | 1.00 27.49 | C |
| ATOM | 1799 | O | THR A 238 | 20.625 | 65.809 | 22.086 | 1.00 27.25 | O |
| ATOM | 1800 | CB | THR A 238 | 23.703 | 65.358 | 21.966 | 1.00 26.45 | C |
| ATOM | 1801 | OG1 | THR A 238 | 24.322 | 66.415 | 22.715 | 1.00 25.53 | O |
| ATOM | 1802 | CG2 | THR A 238 | 24.772 | 64.554 | 21.201 | 1.00 25.98 | C |
| ATOM | 1803 | N | SER A 239 | 21.625 | 67.807 | 22.139 | 1.00 27.90 | N |
| ATOM | 1804 | CA | SER A 239 | 20.604 | 68.413 | 22.993 | 1.00 28.45 | C |
| ATOM | 1805 | C | SER A 239 | 20.517 | 69.911 | 22.794 | 1.00 28.72 | C |
| ATOM | 1806 | O | SER A 239 | 21.513 | 70.537 | 22.445 | 1.00 27.37 | O |
| ATOM | 1807 | CB | SER A 239 | 20.966 | 68.187 | 24.464 | 1.00 28.20 | C |
| ATOM | 1808 | OG | SER A 239 | 19.973 | 68.754 | 25.323 | 1.00 29.36 | O |
| ATOM | 1809 | N | ASP A 240 | 19.333 | 70.480 | 23.044 | 1.00 28.95 | N |
| ATOM | 1810 | CA | ASP A 240 | 19.145 | 71.934 | 22.949 | 1.00 29.73 | C |
| ATOM | 1811 | C | ASP A 240 | 19.113 | 72.529 | 24.379 | 1.00 30.45 | C |
| ATOM | 1812 | O | ASP A 240 | 18.673 | 73.660 | 24.601 | 1.00 30.21 | O |
| ATOM | 1813 | CB | ASP A 240 | 17.840 | 72.259 | 22.203 | 1.00 29.78 | C |
| ATOM | 1814 | CG | ASP A 240 | 16.581 | 71.722 | 22.914 | 1.00 30.38 | C |
| ATOM | 1815 | OD1 | ASP A 240 | 16.675 | 70.880 | 23.832 | 1.00 29.05 | O |
| ATOM | 1816 | OD2 | ASP A 240 | 15.462 | 72.139 | 22.524 | 1.00 31.07 | O |
| ATOM | 1817 | N | VAL A 241 | 19.624 | 71.769 | 25.343 | 1.00 30.35 | N |
| ATOM | 1818 | CA | VAL A 241 | 19.600 | 72.199 | 26.740 | 1.00 30.48 | C |
| ATOM | 1819 | C | VAL A 241 | 20.411 | 73.463 | 27.108 | 1.00 30.96 | C |
| ATOM | 1820 | O | VAL A 241 | 20.073 | 74.167 | 28.082 | 1.00 30.65 | O |
| ATOM | 1821 | CB | VAL A 241 | 20.035 | 71.023 | 27.659 | 1.00 30.92 | C |
| ATOM | 1822 | CG1 | VAL A 241 | 21.523 | 70.832 | 27.576 | 1.00 29.67 | C |
| ATOM | 1823 | CG2 | VAL A 241 | 19.533 | 71.259 | 29.090 | 1.00 29.70 | C |
| ATOM | 1824 | N | ASP A 242 | 21.471 | 73.747 | 26.361 | 1.00 30.20 | N |
| ATOM | 1825 | CA | ASP A 242 | 22.311 | 74.919 | 26.646 | 1.00 30.47 | C |
| ATOM | 1826 | C | ASP A 242 | 21.740 | 76.127 | 25.886 | 1.00 30.87 | C |
| ATOM | 1827 | O | ASP A 242 | 21.702 | 76.116 | 24.657 | 1.00 29.40 | O |
| ATOM | 1828 | CB | ASP A 242 | 23.744 | 74.663 | 26.166 | 1.00 29.62 | C |
| ATOM | 1829 | CG | ASP A 242 | 24.756 | 75.656 | 26.738 | 1.00 30.25 | C |
| ATOM | 1830 | OD1 | ASP A 242 | 24.481 | 76.877 | 26.708 | 1.00 29.94 | O |
| ATOM | 1831 | OD2 | ASP A 242 | 25.841 | 75.217 | 27.218 | 1.00 28.83 | O |
| ATOM | 1832 | N | GLU A 243 | 21.308 | 77.161 | 26.608 | 1.00 31.78 | N |
| ATOM | 1833 | CA | GLU A 243 | 20.747 | 78.341 | 25.958 | 1.00 33.28 | C |
| ATOM | 1834 | C | GLU A 243 | 21.710 | 79.004 | 24.950 | 1.00 32.97 | C |
| ATOM | 1835 | O | GLU A 243 | 21.269 | 79.677 | 24.032 | 1.00 32.62 | O |
| ATOM | 1836 | CB | GLU A 243 | 20.227 | 79.328 | 27.030 | 1.00 36.25 | C |
| ATOM | 1837 | CG | GLU A 243 | 19.054 | 78.651 | 27.835 | 1.00 41.15 | C |
| ATOM | 1838 | CD | GLU A 243 | 18.204 | 79.598 | 28.713 | 1.00 44.26 | C |
| ATOM | 1839 | OE1 | GLU A 243 | 18.803 | 80.469 | 29.409 | 1.00 46.34 | O |
| ATOM | 1840 | OE2 | GLU A 243 | 16.949 | 79.451 | 28.719 | 1.00 45.19 | O |
| ATOM | 1841 | N | ARG A 244 | 23.019 | 78.809 | 25.108 | 1.00 32.05 | N |
| ATOM | 1842 | CA | ARG A 244 | 23.962 | 79.366 | 24.139 | 1.00 31.31 | C |
| ATOM | 1843 | C | ARG A 244 | 23.850 | 78.627 | 22.799 | 1.00 30.57 | C |
| ATOM | 1844 | O | ARG A 244 | 24.257 | 79.143 | 21.769 | 1.00 30.18 | O |
| ATOM | 1845 | CB | ARG A 244 | 25.408 | 79.269 | 24.632 | 1.00 30.94 | C |
| ATOM | 1846 | CG | ARG A 244 | 25.745 | 80.163 | 25.847 | 1.00 30.21 | C |
| ATOM | 1847 | CD | ARG A 244 | 27.123 | 79.776 | 26.444 | 1.00 29.49 | C |
| ATOM | 1848 | NE | ARG A 244 | 27.018 | 78.475 | 27.106 | 1.00 29.08 | N |

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ATOM   1849  CZ   ARG A 244     27.823  78.035  28.071  1.00 28.83          C
ATOM   1850  NH1  ARG A 244     28.832  78.788  28.500  1.00 28.42          N
ATOM   1851  NH2  ARG A 244     27.578  76.850  28.651  1.00 27.69          N
ATOM   1852  N    ASP A 245     23.305  77.420  22.791  1.00 30.19          N
ATOM   1853  CA   ASP A 245     23.173  76.702  21.512  1.00 30.19          C
ATOM   1854  C    ASP A 245     21.802  76.932  20.865  1.00 30.71          C
ATOM   1855  O    ASP A 245     21.626  76.707  19.670  1.00 29.40          O
ATOM   1856  CB   ASP A 245     23.387  75.193  21.706  1.00 28.61          C
ATOM   1857  CG   ASP A 245     24.749  74.875  22.314  1.00 27.80          C
ATOM   1858  OD1  ASP A 245     25.721  75.559  21.953  1.00 27.30          O
ATOM   1859  OD2  ASP A 245     24.838  73.939  23.148  1.00 28.43          O
ATOM   1860  N    GLN A 246     20.841  77.372  21.670  1.00 31.40          N
ATOM   1861  CA   GLN A 246     19.480  77.607  21.186  1.00 33.05          C
ATOM   1862  C    GLN A 246     19.307  78.537  19.980  1.00 33.25          C
ATOM   1863  O    GLN A 246     18.426  78.304  19.161  1.00 33.67          O
ATOM   1864  CB   GLN A 246     18.570  78.020  22.358  1.00 32.98          C
ATOM   1865  CG   GLN A 246     18.249  76.792  23.268  1.00 33.98          C
ATOM   1866  CD   GLN A 246     17.658  77.156  24.644  1.00 35.19          C
ATOM   1867  OE1  GLN A 246     17.213  78.286  24.859  1.00 36.27          O
ATOM   1868  NE2  GLN A 246     17.652  76.195  25.574  1.00 33.83          N
ATOM   1869 ʠN    PRO A 247     20.152  79.565  19.826  1.00 33.10          N
ATOM   1870  CA   PRO A 247     19.955  80.423  18.655  1.00 33.64          C
ATOM   1871  C    PRO A 247     20.122  79.651  17.337  1.00 34.04          C
ATOM   1872  O    PRO A 247     19.688  80.114  16.279  1.00 33.90          O
ATOM   1873  CB   PRO A 247     21.043  81.504  18.815  1.00 33.46          C
ATOM   1874  CG   PRO A 247     21.205  81.607  20.317  1.00 33.31          C
ATOM   1875  CD   PRO A 247     21.145  80.140  20.754  1.00 33.91          C
ATOM   1876  N    PHE A 248     20.744  78.475  17.392  1.00 33.17          N
ATOM   1877  CA   PHE A 248     20.968  77.712  16.170  1.00 32.82          C
ATOM   1878  C    PHE A 248     20.073  76.479  15.973  1.00 32.76          C
ATOM   1879  O    PHE A 248     20.083  75.857  14.904  1.00 32.04          O
ATOM   1880  CB   PHE A 248     22.447  77.333  16.104  1.00 32.59          C
ATOM   1881  CG   PHE A 248     23.366  78.513  16.239  1.00 32.14          C
ATOM   1882  CD1  PHE A 248     23.481  79.441  15.214  1.00 32.38          C
ATOM   1883  CD2  PHE A 248     24.096  78.716  17.410  1.00 33.02          C
ATOM   1884  CE1  PHE A 248     24.317  80.559  15.349  1.00 32.23          C
ATOM   1885  CE2  PHE A 248     24.935  79.831  17.556  1.00 32.03          C
ATOM   1886  CZ   PHE A 248     25.047  80.751  16.524  1.00 32.27          C
ATOM   1887  N    ILE A 249     19.307  76.148  17.004  1.00 32.63          N
ATOM   1888  CA   ILE A 249     18.394  75.009  16.997  1.00 33.56          C
ATOM   1889  C    ILE A 249     17.276  75.348  16.026  1.00 34.60          C
ATOM   1890  O    ILE A 249     16.734  76.453  16.084  1.00 35.27          O
ATOM   1891  CB   ILE A 249     17.819  74.821  18.408  1.00 33.44          C
ATOM   1892  CG1  ILE A 249     18.934  74.348  19.357  1.00 33.15          C
ATOM   1893  CG2  ILE A 249     16.614  73.859  18.383  1.00 33.08          C
ATOM   1894  CD1  ILE A 249     19.415  72.928  19.079  1.00 33.05          C
ATOM   1895  N    THR A 250     16.923  74.420  15.143  1.00 35.17          N
ATOM   1896  CA   THR A 250     15.878  74.671  14.141  1.00 35.59          C
ATOM   1897  C    THR A 250     14.513  74.325  14.672  1.00 35.96          C
ATOM   1898  O    THR A 250     13.513  74.781  14.138  1.00 35.84          O
ATOM   1899  CB   THR A 250     16.055  73.798  12.871  1.00 34.62          C
ATOM   1900  OG1  THR A 250     15.699  72.444  13.180  1.00 33.39          O
ATOM   1901  CG2  THR A 250     17.491  73.820  12.397  1.00 34.62          C
ATOM   1902  N    GLY A 251     14.471  73.475  15.692  1.00 36.31          N
ATOM   1903  CA   GLY A 251     13.191  73.068  16.239  1.00 36.47          C
ATOM   1904  C    GLY A 251     12.832  71.660  15.796  1.00 37.05          C
ATOM   1905  O    GLY A 251     11.885  71.067  16.316  1.00 36.77          O
ATOM   1906  N    GLU A 252     13.583  71.115  14.837  1.00 36.08          N
ATOM   1907  CA   GLU A 252     13.330  69.760  14.364  1.00 36.67          C
ATOM   1908  C    GLU A 252     14.191  68.775  15.159  1.00 35.94          C
ATOM   1909  O    GLU A 252     15.356  69.073  15.461  1.00 35.17          O
ATOM   1910  CB   GLU A 252     13.704  69.634  12.872  1.00 37.50          C
ATOM   1911  CG   GLU A 252     12.856  70.501  11.934  1.00 39.44          C
ATOM   1912  CD   GLU A 252     13.598  70.864  10.640  1.00 40.75          C
ATOM   1913  OE1  GLU A 252     14.713  71.427  10.741  1.00 40.87          O
ATOM   1914  OE2  GLU A 252     13.077  70.597   9.533  1.00 40.36          O
ATOM   1915  N    ARG A 253     13.628  67.618  15.501  1.00 34.78          N
ATOM   1916  CA   ARG A 253     14.415  66.587  16.197  1.00 34.37          C
ATOM   1917  C    ARG A 253     14.275  65.309  15.355  1.00 33.36          C
ATOM   1918  O    ARG A 253     13.171  64.960  14.945  1.00 32.17          O
ATOM   1919  CB   ARG A 253     13.924  66.356  17.630  1.00 33.59          C
ATOM   1920  CG   ARG A 253     15.002  65.702  18.486  1.00 34.79          C
ATOM   1921  CD   ARG A 253     14.603  65.539  19.954  1.00 33.85          C
ATOM   1922  NE   ARG A 253     13.507  64.589  20.120  1.00 33.37          N
ATOM   1923  CZ   ARG A 253     13.077  64.145  21.300  1.00 34.01          C
ATOM   1924  NH1  ARG A 253     13.678  64.560  22.433  1.00 31.61          N
ATOM   1925  NH2  ARG A 253     12.018  63.322  21.355  1.00 32.36          N
ATOM   1926  N    THR A 254     15.398  64.636  15.103  1.00 32.45          N
ATOM   1927  CA   THR A 254     15.433  63.440  14.258  1.00 31.90          C
ATOM   1928  C    THR A 254     14.900  62.181  14.905  1.00 32.24          C
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ATOM   1929  O    THR A 254      14.653  62.141  16.103  1.00 32.21           O
ATOM   1930  CB   THR A 254      16.886  63.127  13.768  1.00 30.94           C
ATOM   1931  OG1  THR A 254      17.650  62.558  14.846  1.00 29.56           O
ATOM   1932  CG2  THR A 254      17.565  64.405  13.253  1.00 29.91           C
ATOM   1933  N    ARG A 255      14.758  61.135  14.099  1.00 32.58           N
ATOM   1934  CA   ARG A 255      14.266  59.848  14.578  1.00 33.48           C
ATOM   1935  C    ARG A 255      15.205  59.260  15.652  1.00 33.37           C
ATOM   1936  O    ARG A 255      14.784  58.441  16.473  1.00 33.21           O
ATOM   1937  CB   ARG A 255      14.082  58.888  13.368  1.00 33.63           C
ATOM   1938  CG   ARG A 255      13.584  57.483  13.676  1.00 34.65           C
ATOM   1939  CD   ARG A 255      12.211  57.428  14.390  1.00 36.69           C
ATOM   1940  NE   ARG A 255      11.177  58.252  13.763  1.00 37.01           N
ATOM   1941  CZ   ARG A 255       9.924  58.369  14.218  1.00 38.41           C
ATOM   1942  NH1  ARG A 255       9.535  57.703  15.299  1.00 37.20           N
ATOM   1943  NH2  ARG A 255       9.065  59.190  13.610  1.00 37.85           N
ATOM   1944  N    GLU A 256      16.465  59.694  15.665  1.00 33.19           N
ATOM   1945  CA   GLU A 256      17.406  59.218  16.679  1.00 33.20           C
ATOM   1946  C    GLU A 256      17.466  60.158  17.889  1.00 32.90           C
ATOM   1947  O    GLU A 256      18.230  59.928  18.834  1.00 32.76           O
ATOM   1948  CB   GLU A 256      18.810  59.051  16.080  1.00 33.56           C
ATOM   1949  CG   GLU A 256      18.903  57.904  15.081  1.00 34.49           C
ATOM   1950  CD   GLU A 256      18.170  58.213  13.774  1.00 35.55           C
ATOM   1951  OE1  GLU A 256      18.415  59.308  13.219  1.00 35.09           O
ATOM   1952  OE2  GLU A 256      17.365  57.367  13.310  1.00 36.21           O
ATOM   1953  N    GLY A 257      16.657  61.209  17.860  1.00 32.25           N
ATOM   1954  CA   GLY A 257      16.631  62.162  18.968  1.00 32.06           C
ATOM   1955  C    GLY A 257      17.644  63.296  18.933  1.00 32.26           C
ATOM   1956  O    GLY A 257      17.833  63.993  19.948  1.00 33.26           O
ATOM   1957  N    PHE A 258      18.320  63.504  17.806  1.00 31.28           N
ATOM   1958  CA   PHE A 258      19.273  64.605  17.734  1.00 31.56           C
ATOM   1959  C    PHE A 258      18.540  65.841  17.213  1.00 31.31           C
ATOM   1960  O    PHE A 258      17.538  65.711  16.521  1.00 30.95           O
ATOM   1961  CB   PHE A 258      20.469  64.264  16.832  1.00 32.04           C
ATOM   1962  CG   PHE A 258      21.255  63.065  17.300  1.00 34.18           C
ATOM   1963  CD1  PHE A 258      21.652  62.954  18.630  1.00 34.31           C
ATOM   1964  CD2  PHE A 258      21.589  62.036  16.404  1.00 34.88           C
ATOM   1965  CE1  PHE A 258      22.377  61.832  19.079  1.00 35.75           C
ATOM   1966  CE2  PHE A 258      22.315  60.900  16.835  1.00 35.37           C
ATOM   1967  CZ   PHE A 258      22.709  60.802  18.171  1.00 35.78           C
ATOM   1968  N    TYR A 259      19.036  67.024  17.571  1.00 30.78           N
ATOM   1969  CA   TYR A 259      18.415  68.278  17.177  1.00 30.98           C
ATOM   1970  C    TYR A 259      19.105  68.851  15.960  1.00 31.64           C
ATOM   1971  O    TYR A 259      20.339  68.908  15.903  1.00 30.98           O
ATOM   1972  CB   TYR A 259      18.485  69.297  18.311  1.00 29.61           C
ATOM   1973  CG   TYR A 259      17.722  68.873  19.554  1.00 29.28           C
ATOM   1974  CD1  TYR A 259      18.225  67.883  20.415  1.00 29.21           C
ATOM   1975  CD2  TYR A 259      16.460  69.418  19.837  1.00 28.72           C
ATOM   1976  CE1  TYR A 259      17.469  67.436  21.539  1.00 28.49           C
ATOM   1977  CE2  TYR A 259      15.709  68.992  20.951  1.00 27.95           C
ATOM   1978  CZ   TYR A 259      16.217  68.005  21.789  1.00 28.77           C
ATOM   1979  OH   TYR A 259      15.470  67.579  22.870  1.00 27.58           O
ATOM   1980  N    ARG A 260      18.296  69.259  14.990  1.00 31.67           N
ATOM   1981  CA   ARG A 260      18.830  69.875  13.800  1.00 32.89           C
ATOM   1982  C    ARG A 260      19.306  71.264  14.217  1.00 31.65           C
ATOM   1983  O    ARG A 260      18.637  71.957  14.995  1.00 30.11           O
ATOM   1984  CB   ARG A 260      17.758  69.923  12.710  1.00 35.28           C
ATOM   1985  CG   ARG A 260      18.264  69.239  11.461  1.00 40.31           C
ATOM   1986  CD   ARG A 260      17.376  68.163  10.896  1.00 42.47           C
ATOM   1987  NE   ARG A 260      18.238  67.115  10.330  1.00 45.65           N
ATOM   1988  CZ   ARG A 260      17.803  65.934   9.906  1.00 46.14           C
ATOM   1989  NH1  ARG A 260      16.498  65.628   9.966  1.00 45.66           N
ATOM   1990  NH2  ARG A 260      18.680  65.044   9.467  1.00 46.33           N
ATOM   1991  N    THR A 261      20.481  71.647  13.729  1.00 30.73           N
ATOM   1992  CA   THR A 261      21.061  72.921  14.112  1.00 31.30           C
ATOM   1993  C    THR A 261      21.739  73.630  12.936  1.00 32.23           C
ATOM   1994  O    THR A 261      22.358  72.982  12.082  1.00 30.93           O
ATOM   1995  CB   THR A 261      22.053  72.708  15.273  1.00 30.71           C
ATOM   1996  OG1  THR A 261      22.573  73.964  15.704  1.00 29.82           O
ATOM   1997  CG2  THR A 261      23.212  71.766  14.838  1.00 30.08           C
ATOM   1998  N    LYS A 262      21.600  74.956  12.908  1.00 33.00           N
ATOM   1999  CA   LYS A 262      22.151  75.808  11.851  1.00 35.10           C
ATOM   2000  C    LYS A 262      23.666  75.829  11.955  1.00 34.83           C
ATOM   2001  O    LYS A 262      24.200  76.205  12.997  1.00 34.82           O
ATOM   2002  CB   LYS A 262      21.621  77.243  12.000  1.00 36.87           C
ATOM   2003  CG   LYS A 262      20.846  77.722  10.829  1.00 41.43           C
ATOM   2004  CD   LYS A 262      20.775  79.268  10.740  1.00 43.77           C
ATOM   2005  CE   LYS A 262      20.441  79.963  12.065  1.00 45.84           C
ATOM   2006  NZ   LYS A 262      19.250  79.394  12.774  1.00 47.74           N
ATOM   2007  N    ASN A 263      24.353  75.454  10.879  1.00 34.66           N
ATOM   2008  CA   ASN A 263      25.822  75.386  10.882  1.00 34.52           C
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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 2009 | C | ASN | A | 263 | 26.473 | 76.605 | 10.235 | 1.00 | 34.50 | C |
| ATOM | 2010 | O | ASN | A | 263 | 25.802 | 77.534 | 9.863 | 1.00 | 34.78 | O |
| ATOM | 2011 | CB | ASN | A | 263 | 26.286 | 74.092 | 10.190 | 1.00 | 35.05 | C |
| ATOM | 2012 | CG | ASN | A | 263 | 25.962 | 74.067 | 8.696 | 1.00 | 36.43 | C |
| ATOM | 2013 | OD1 | ASN | A | 263 | 25.570 | 75.077 | 8.121 | 1.00 | 36.29 | O |
| ATOM | 2014 | ND2 | ASN | A | 263 | 26.155 | 72.921 | 8.064 | 1.00 | 37.13 | N |
| ATOM | 2015 | N | GLY | A | 264 | 27.787 | 76.614 | 10.121 | 1.00 | 34.17 | N |
| ATOM | 2016 | CA | GLY | A | 264 | 28.448 | 77.742 | 9.500 | 1.00 | 34.21 | C |
| ATOM | 2017 | C | GLY | A | 264 | 29.378 | 78.481 | 10.442 | 1.00 | 33.65 | C |
| ATOM | 2018 | O | GLY | A | 264 | 29.611 | 78.079 | 11.587 | 1.00 | 33.14 | O |
| ATOM | 2019 | N | ILE | A | 265 | 29.907 | 79.594 | 9.964 | 1.00 | 33.13 | N |
| ATOM | 2020 | CA | ILE | A | 265 | 30.848 | 80.337 | 10.763 | 1.00 | 33.25 | C |
| ATOM | 2021 | C | ILE | A | 265 | 30.244 | 81.005 | 12.019 | 1.00 | 33.08 | C |
| ATOM | 2022 | O | ILE | A | 265 | 30.945 | 81.213 | 13.010 | 1.00 | 31.69 | O |
| ATOM | 2023 | CB | ILE | A | 265 | 31.578 | 81.372 | 9.875 | 1.00 | 33.87 | C |
| ATOM | 2024 | CG1 | ILE | A | 265 | 32.751 | 81.982 | 10.643 | 1.00 | 33.72 | C |
| ATOM | 2025 | CG2 | ILE | A | 265 | 30.571 | 82.426 | 9.388 | 1.00 | 33.78 | C |
| ATOM | 2026 | CD1 | ILE | A | 265 | 33.648 | 82.797 | 9.771 | 1.00 | 34.46 | C |
| ATOM | 2027 | N | GLU | A | 266 | 28.949 | 81.302 | 11.989 | 1.00 | 32.69 | N |
| ATOM | 2028 | CA | GLU | A | 266 | 28.296 | 81.942 | 13.128 | 1.00 | 33.93 | C |
| ATOM | 2029 | C | GLU | A | 266 | 28.386 | 81.097 | 14.423 | 1.00 | 32.73 | C |
| ATOM | 2030 | O | GLU | A | 266 | 28.850 | 81.586 | 15.451 | 1.00 | 32.71 | O |
| ATOM | 2031 | CB | GLU | A | 266 | 26.829 | 82.224 | 12.790 | 1.00 | 36.97 | C |
| ATOM | 2032 | CG | GLU | A | 266 | 26.416 | 83.637 | 13.077 | 1.00 | 41.77 | C |
| ATOM | 2033 | CD | GLU | A | 266 | 24.892 | 83.826 | 13.061 | 1.00 | 44.65 | C |
| ATOM | 2034 | OE1 | GLU | A | 266 | 24.307 | 83.660 | 11.960 | 1.00 | 45.64 | O |
| ATOM | 2035 | OE2 | GLU | A | 266 | 24.297 | 84.132 | 14.146 | 1.00 | 45.79 | O |
| ATOM | 2036 | N | PRO | A | 267 | 27.905 | 79.834 | 14.393 | 1.00 | 31.24 | N |
| ATOM | 2037 | CA | PRO | A | 267 | 28.012 | 79.038 | 15.622 | 1.00 | 30.66 | C |
| ATOM | 2038 | C | PRO | A | 267 | 29.495 | 78.789 | 16.006 | 1.00 | 29.81 | C |
| ATOM | 2039 | O | PRO | A | 267 | 29.831 | 78.679 | 17.201 | 1.00 | 29.89 | O |
| ATOM | 2040 | CB | PRO | A | 267 | 27.226 | 77.754 | 15.294 | 1.00 | 30.32 | C |
| ATOM | 2041 | CG | PRO | A | 267 | 27.281 | 77.684 | 13.709 | 1.00 | 30.92 | C |
| ATOM | 2042 | CD | PRO | A | 267 | 27.103 | 79.148 | 13.359 | 1.00 | 30.86 | C |
| ATOM | 2043 | N | CYS | A | 268 | 30.382 | 78.714 | 15.012 | 1.00 | 28.83 | N |
| ATOM | 2044 | CA | CYS | A | 268 | 31.811 | 78.548 | 15.296 | 1.00 | 28.17 | C |
| ATOM | 2045 | C | CYS | A | 268 | 32.337 | 79.727 | 16.113 | 1.00 | 28.16 | C |
| ATOM | 2046 | O | CYS | A | 268 | 33.092 | 79.553 | 17.063 | 1.00 | 27.06 | O |
| ATOM | 2047 | CB | CYS | A | 268 | 32.629 | 78.447 | 14.006 | 1.00 | 28.14 | C |
| ATOM | 2048 | SG | CYS | A | 268 | 32.386 | 76.879 | 13.109 | 1.00 | 28.45 | S |
| ATOM | 2049 | N | ILE | A | 269 | 31.947 | 80.935 | 15.721 | 1.00 | 28.27 | N |
| ATOM | 2050 | CA | ILE | A | 269 | 32.385 | 82.137 | 16.416 | 1.00 | 28.50 | C |
| ATOM | 2051 | C | ILE | A | 269 | 31.825 | 82.157 | 17.831 | 1.00 | 28.33 | C |
| ATOM | 2052 | O | ILE | A | 269 | 32.555 | 82.438 | 18.785 | 1.00 | 28.49 | O |
| ATOM | 2053 | CB | ILE | A | 269 | 31.955 | 83.413 | 15.606 | 1.00 | 29.23 | C |
| ATOM | 2054 | CG1 | ILE | A | 269 | 32.862 | 83.563 | 14.377 | 1.00 | 29.38 | C |
| ATOM | 2055 | CG2 | ILE | A | 269 | 32.012 | 84.657 | 16.490 | 1.00 | 28.91 | C |
| ATOM | 2056 | CD1 | ILE | A | 269 | 32.360 | 84.600 | 13.318 | 1.00 | 30.32 | C |
| ATOM | 2057 | N | ALA | A | 270 | 30.544 | 81.838 | 17.993 | 1.00 | 28.24 | N |
| ATOM | 2058 | CA | ALA | A | 270 | 29.954 | 81.831 | 19.341 | 1.00 | 28.61 | C |
| ATOM | 2059 | C | ALA | A | 270 | 30.642 | 80.762 | 20.219 | 1.00 | 28.73 | C |
| ATOM | 2060 | O | ALA | A | 270 | 30.989 | 81.015 | 21.388 | 1.00 | 28.20 | O |
| ATOM | 2061 | CB | ALA | A | 270 | 28.439 | 81.547 | 19.269 | 1.00 | 28.74 | C |
| ATOM | 2062 | N | ARG | A | 271 | 30.846 | 79.571 | 19.667 | 1.00 | 28.34 | N |
| ATOM | 2063 | CA | ARG | A | 271 | 31.486 | 78.509 | 20.458 | 1.00 | 28.65 | C |
| ATOM | 2064 | C | ARG | A | 271 | 32.907 | 78.914 | 20.837 | 1.00 | 28.18 | C |
| ATOM | 2065 | O | ARG | A | 271 | 33.328 | 78.719 | 21.971 | 1.00 | 27.90 | O |
| ATOM | 2066 | CB | ARG | A | 271 | 31.514 | 77.196 | 19.680 | 1.00 | 28.64 | C |
| ATOM | 2067 | CG | ARG | A | 271 | 30.119 | 76.663 | 19.365 | 1.00 | 29.97 | C |
| ATOM | 2068 | CD | ARG | A | 271 | 29.975 | 75.320 | 19.936 | 1.00 | 30.60 | C |
| ATOM | 2069 | NE | ARG | A | 271 | 28.645 | 74.746 | 19.776 | 1.00 | 30.69 | N |
| ATOM | 2070 | CZ | ARG | A | 271 | 28.302 | 73.586 | 20.325 | 1.00 | 30.13 | C |
| ATOM | 2071 | NH1 | ARG | A | 271 | 29.205 | 72.913 | 21.031 | 1.00 | 30.79 | N |
| ATOM | 2072 | NH2 | ARG | A | 271 | 27.071 | 73.128 | 20.227 | 1.00 | 29.53 | N |
| ATOM | 2073 | N | ALA | A | 272 | 33.630 | 79.473 | 19.875 | 1.00 | 27.88 | N |
| ATOM | 2074 | CA | ALA | A | 272 | 35.000 | 79.910 | 20.115 | 1.00 | 28.08 | C |
| ATOM | 2075 | C | ALA | A | 272 | 35.059 | 80.890 | 21.289 | 1.00 | 28.92 | C |
| ATOM | 2076 | O | ALA | A | 272 | 35.974 | 80.804 | 22.139 | 1.00 | 28.28 | O |
| ATOM | 2077 | CB | ALA | A | 272 | 35.537 | 80.566 | 18.880 | 1.00 | 28.07 | C |
| ATOM | 2078 | N | LYS | A | 273 | 34.098 | 81.825 | 21.338 | 1.00 | 28.90 | N |
| ATOM | 2079 | CA | LYS | A | 273 | 34.075 | 82.813 | 22.423 | 1.00 | 29.91 | C |
| ATOM | 2080 | C | LYS | A | 273 | 33.744 | 82.143 | 23.747 | 1.00 | 29.42 | C |
| ATOM | 2081 | O | LYS | A | 273 | 34.302 | 82.498 | 24.773 | 1.00 | 30.26 | O |
| ATOM | 2082 | CB | LYS | A | 273 | 33.034 | 83.908 | 22.155 | 1.00 | 31.58 | C |
| ATOM | 2083 | CG | LYS | A | 273 | 33.345 | 84.818 | 20.988 | 1.00 | 33.20 | C |
| ATOM | 2084 | CD | LYS | A | 273 | 32.100 | 85.674 | 20.683 | 1.00 | 34.65 | C |
| ATOM | 2085 | CE | LYS | A | 273 | 32.405 | 86.684 | 19.611 | 1.00 | 35.29 | C |
| ATOM | 2086 | NZ | LYS | A | 273 | 31.223 | 87.537 | 19.315 | 1.00 | 36.58 | N |
| ATOM | 2087 | N | ALA | A | 274 | 32.800 | 81.210 | 23.743 | 1.00 | 28.80 | N |
| ATOM | 2088 | CA | ALA | A | 274 | 32.485 | 80.489 | 24.977 | 1.00 | 28.35 | C |

| ATOM | 2089 | C   | ALA | A | 274 | 33.675 | 79.631 | 25.435 | 1.00 | 27.68 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2090 | O   | ALA | A | 274 | 33.860 | 79.410 | 26.637 | 1.00 | 27.27 | O |
| ATOM | 2091 | CB  | ALA | A | 274 | 31.256 | 79.590 | 24.774 | 1.00 | 27.77 | C |
| ATOM | 2092 | N   | TYR | A | 275 | 34.471 | 79.130 | 24.487 | 1.00 | 27.04 | N |
| ATOM | 2093 | CA  | TYR | A | 275 | 35.614 | 78.274 | 24.839 | 1.00 | 26.41 | C |
| ATOM | 2094 | C   | TYR | A | 275 | 36.901 | 79.023 | 25.225 | 1.00 | 26.51 | C |
| ATOM | 2095 | O   | TYR | A | 275 | 37.759 | 78.455 | 25.883 | 1.00 | 25.95 | O |
| ATOM | 2096 | CB  | TYR | A | 275 | 35.983 | 77.332 | 23.669 | 1.00 | 25.13 | C |
| ATOM | 2097 | CG  | TYR | A | 275 | 34.882 | 76.371 | 23.199 | 1.00 | 23.87 | C |
| ATOM | 2098 | CD1 | TYR | A | 275 | 33.789 | 76.057 | 24.005 | 1.00 | 24.52 | C |
| ATOM | 2099 | CD2 | TYR | A | 275 | 34.965 | 75.768 | 21.949 | 1.00 | 24.05 | C |
| ATOM | 2100 | CE1 | TYR | A | 275 | 32.794 | 75.150 | 23.569 | 1.00 | 24.27 | C |
| ATOM | 2101 | CE2 | TYR | A | 275 | 33.984 | 74.861 | 21.505 | 1.00 | 23.83 | C |
| ATOM | 2102 | CZ  | TYR | A | 275 | 32.912 | 74.567 | 22.311 | 1.00 | 23.58 | C |
| ATOM | 2103 | OH  | TYR | A | 275 | 31.939 | 73.733 | 21.817 | 1.00 | 24.04 | O |
| ATOM | 2104 | N   | ALA | A | 276 | 37.024 | 80.283 | 24.796 | 1.00 | 26.37 | N |
| ATOM | 2105 | CA  | ALA | A | 276 | 38.232 | 81.072 | 25.017 | 1.00 | 26.64 | C |
| ATOM | 2106 | C   | ALA | A | 276 | 38.818 | 81.055 | 26.419 | 1.00 | 26.84 | C |
| ATOM | 2107 | O   | ALA | A | 276 | 40.029 | 80.925 | 26.581 | 1.00 | 26.92 | O |
| ATOM | 2108 | CB  | ALA | A | 276 | 38.007 | 82.523 | 24.559 | 1.00 | 27.52 | C |
| ATOM | 2109 | N   | PRO | A | 277 | 37.986 | 81.211 | 27.444 | 1.00 | 27.04 | N |
| ATOM | 2110 | CA  | PRO | A | 277 | 38.496 | 81.209 | 28.828 | 1.00 | 28.35 | C |
| ATOM | 2111 | C   | PRO | A | 277 | 39.048 | 79.840 | 29.259 | 1.00 | 28.78 | C |
| ATOM | 2112 | O   | PRO | A | 277 | 39.697 | 79.734 | 30.304 | 1.00 | 28.24 | O |
| ATOM | 2113 | CB  | PRO | A | 277 | 37.261 | 81.555 | 29.681 | 1.00 | 28.04 | C |
| ATOM | 2114 | CG  | PRO | A | 277 | 36.307 | 82.232 | 28.711 | 1.00 | 28.58 | C |
| ATOM | 2115 | CD  | PRO | A | 277 | 36.539 | 81.469 | 27.400 | 1.00 | 27.85 | C |
| ATOM | 2116 | N   | PHE | A | 278 | 38.775 | 78.812 | 28.451 | 1.00 | 28.56 | N |
| ATOM | 2117 | CA  | PHE | A | 278 | 39.167 | 77.429 | 28.780 | 1.00 | 28.49 | C |
| ATOM | 2118 | C   | PHE | A | 278 | 40.167 | 76.802 | 27.821 | 1.00 | 29.10 | C |
| ATOM | 2119 | O   | PHE | A | 278 | 40.491 | 75.612 | 27.950 | 1.00 | 28.74 | O |
| ATOM | 2120 | CB  | PHE | A | 278 | 37.913 | 76.554 | 28.814 | 1.00 | 28.18 | C |
| ATOM | 2121 | CG  | PHE | A | 278 | 36.862 | 77.053 | 29.785 | 1.00 | 28.59 | C |
| ATOM | 2122 | CD1 | PHE | A | 278 | 37.017 | 76.861 | 31.151 | 1.00 | 27.54 | C |
| ATOM | 2123 | CD2 | PHE | A | 278 | 35.781 | 77.804 | 29.326 | 1.00 | 27.32 | C |
| ATOM | 2124 | CE1 | PHE | A | 278 | 36.099 | 77.421 | 32.062 | 1.00 | 29.54 | C |
| ATOM | 2125 | CE2 | PHE | A | 278 | 34.859 | 78.370 | 30.215 | 1.00 | 28.27 | C |
| ATOM | 2126 | CZ  | PHE | A | 278 | 35.006 | 78.189 | 31.587 | 1.00 | 27.97 | C |
| ATOM | 2127 | N   | ALA | A | 279 | 40.683 | 77.601 | 26.892 | 1.00 | 28.70 | N |
| ATOM | 2128 | CA  | ALA | A | 279 | 41.609 | 77.083 | 25.903 | 1.00 | 28.65 | C |
| ATOM | 2129 | C   | ALA | A | 279 | 42.781 | 78.002 | 25.612 | 1.00 | 28.97 | C |
| ATOM | 2130 | O   | ALA | A | 279 | 42.613 | 79.223 | 25.484 | 1.00 | 29.24 | O |
| ATOM | 2131 | CB  | ALA | A | 279 | 40.845 | 76.811 | 24.585 | 1.00 | 28.09 | C |
| ATOM | 2132 | N   | ASP | A | 280 | 43.969 | 77.427 | 25.493 | 1.00 | 28.48 | N |
| ATOM | 2133 | CA  | ASP | A | 280 | 45.126 | 78.234 | 25.160 | 1.00 | 28.21 | C |
| ATOM | 2134 | C   | ASP | A | 280 | 45.094 | 78.603 | 23.685 | 1.00 | 28.63 | C |
| ATOM | 2135 | O   | ASP | A | 280 | 45.670 | 79.617 | 23.294 | 1.00 | 28.78 | O |
| ATOM | 2136 | CB  | ASP | A | 280 | 46.419 | 77.502 | 25.480 | 1.00 | 27.07 | C |
| ATOM | 2137 | CG  | ASP | A | 280 | 46.551 | 77.222 | 26.937 | 1.00 | 28.31 | C |
| ATOM | 2138 | OD1 | ASP | A | 280 | 46.328 | 78.178 | 27.753 | 1.00 | 27.05 | O |
| ATOM | 2139 | OD2 | ASP | A | 280 | 46.867 | 76.053 | 27.271 | 1.00 | 26.70 | O |
| ATOM | 2140 | N   | LEU | A | 281 | 44.477 | 77.761 | 22.854 | 1.00 | 27.71 | N |
| ATOM | 2141 | CA  | LEU | A | 281 | 44.344 | 78.060 | 21.435 | 1.00 | 27.93 | C |
| ATOM | 2142 | C   | LEU | A | 281 | 43.002 | 77.530 | 20.977 | 1.00 | 28.05 | C |
| ATOM | 2143 | O   | LEU | A | 281 | 42.493 | 76.552 | 21.535 | 1.00 | 27.08 | O |
| ATOM | 2144 | CB  | LEU | A | 281 | 45.448 | 77.425 | 20.577 | 1.00 | 28.19 | C |
| ATOM | 2145 | CG  | LEU | A | 281 | 46.870 | 77.962 | 20.787 | 1.00 | 29.06 | C |
| ATOM | 2146 | CD1 | LEU | A | 281 | 47.575 | 77.084 | 21.772 | 1.00 | 29.01 | C |
| ATOM | 2147 | CD2 | LEU | A | 281 | 47.629 | 78.001 | 19.500 | 1.00 | 29.91 | C |
| ATOM | 2148 | N   | ILE | A | 282 | 42.421 | 78.172 | 19.970 | 1.00 | 28.23 | N |
| ATOM | 2149 | CA  | ILE | A | 282 | 41.117 | 77.731 | 19.458 | 1.00 | 28.19 | C |
| ATOM | 2150 | C   | ILE | A | 282 | 41.247 | 77.440 | 17.975 | 1.00 | 28.55 | C |
| ATOM | 2151 | O   | ILE | A | 282 | 41.924 | 78.169 | 17.250 | 1.00 | 28.64 | O |
| ATOM | 2152 | CB  | ILE | A | 282 | 40.047 | 78.802 | 19.660 | 1.00 | 28.76 | C |
| ATOM | 2153 | CG1 | ILE | A | 282 | 40.001 | 79.205 | 21.130 | 1.00 | 29.19 | C |
| ATOM | 2154 | CG2 | ILE | A | 282 | 38.675 | 78.252 | 19.217 | 1.00 | 28.17 | C |
| ATOM | 2155 | CD1 | ILE | A | 282 | 39.068 | 80.350 | 21.391 | 1.00 | 30.88 | C |
| ATOM | 2156 | N   | TRP | A | 283 | 40.576 | 76.383 | 17.534 | 1.00 | 28.45 | N |
| ATOM | 2157 | CA  | TRP | A | 283 | 40.598 | 75.937 | 16.156 | 1.00 | 28.09 | C |
| ATOM | 2158 | C   | TRP | A | 283 | 39.194 | 75.659 | 15.625 | 1.00 | 28.41 | C |
| ATOM | 2159 | O   | TRP | A | 283 | 38.425 | 74.910 | 16.225 | 1.00 | 27.98 | O |
| ATOM | 2160 | CB  | TRP | A | 283 | 41.472 | 74.680 | 16.104 | 1.00 | 28.05 | C |
| ATOM | 2161 | CG  | TRP | A | 283 | 41.384 | 73.835 | 14.906 | 1.00 | 28.24 | C |
| ATOM | 2162 | CD1 | TRP | A | 283 | 41.048 | 74.220 | 13.628 | 1.00 | 28.01 | C |
| ATOM | 2163 | CD2 | TRP | A | 283 | 41.714 | 72.444 | 14.839 | 1.00 | 27.14 | C |
| ATOM | 2164 | NE1 | TRP | A | 283 | 41.155 | 73.138 | 12.775 | 1.00 | 28.07 | N |
| ATOM | 2165 | CE2 | TRP | A | 283 | 41.555 | 72.040 | 13.495 | 1.00 | 28.29 | C |
| ATOM | 2166 | CE3 | TRP | A | 283 | 42.135 | 71.501 | 15.791 | 1.00 | 27.75 | C |
| ATOM | 2167 | CZ2 | TRP | A | 283 | 41.799 | 70.730 | 13.073 | 1.00 | 27.31 | C |
| ATOM | 2168 | CZ3 | TRP | A | 283 | 42.383 | 70.195 | 15.373 | 1.00 | 27.42 | C |

| ATOM | 2169 | CH2 | TRP A 283 | 42.211 | 69.824 | 14.035 | 1.00 27.36 | C |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 2170 | N   | MET A 284 | 38.869 | 76.304 | 14.509 | 1.00 28.22 | N |
| ATOM | 2171 | CA  | MET A 284 | 37.606 | 76.127 | 13.829 | 1.00 28.82 | C |
| ATOM | 2172 | C   | MET A 284 | 37.894 | 75.108 | 12.721 | 1.00 29.07 | C |
| ATOM | 2173 | O   | MET A 284 | 38.644 | 75.392 | 11.768 | 1.00 27.82 | O |
| ATOM | 2174 | CB  | MET A 284 | 37.171 | 77.447 | 13.197 | 1.00 29.79 | C |
| ATOM | 2175 | CG  | MET A 284 | 36.026 | 77.303 | 12.234 | 1.00 32.13 | C |
| ATOM | 2176 | SD  | MET A 284 | 35.590 | 78.958 | 11.487 | 1.00 31.42 | S |
| ATOM | 2177 | CE  | MET A 284 | 37.106 | 79.228 | 10.420 | 1.00 34.25 | C |
| ATOM | 2178 | N   | GLU A 285 | 37.340 | 73.908 | 12.849 | 1.00 29.32 | N |
| ATOM | 2179 | CA  | GLU A 285 | 37.584 | 72.881 | 11.829 | 1.00 30.63 | C |
| ATOM | 2180 | C   | GLU A 285 | 36.939 | 73.413 | 10.545 | 1.00 31.73 | C |
| ATOM | 2181 | O   | GLU A 285 | 35.812 | 73.906 | 10.579 | 1.00 30.27 | O |
| ATOM | 2182 | CB  | GLU A 285 | 36.955 | 71.554 | 12.296 | 1.00 31.26 | C |
| ATOM | 2183 | CG  | GLU A 285 | 36.668 | 70.521 | 11.208 | 1.00 31.70 | C |
| ATOM | 2184 | CD  | GLU A 285 | 37.909 | 69.816 | 10.711 | 1.00 32.66 | C |
| ATOM | 2185 | OE1 | GLU A 285 | 39.042 | 70.152 | 11.155 | 1.00 33.70 | O |
| ATOM | 2186 | OE2 | GLU A 285 | 37.748 | 68.920 | 9.857  | 1.00 33.29 | O |
| ATOM | 2187 | N   | THR A 286 | 37.652 | 73.339 | 9.418  | 1.00 33.35 | N |
| ATOM | 2188 | CA  | THR A 286 | 37.099 | 73.850 | 8.167  | 1.00 35.17 | C |
| ATOM | 2189 | C   | THR A 286 | 37.473 | 72.978 | 6.978  | 1.00 36.06 | C |
| ATOM | 2190 | O   | THR A 286 | 38.595 | 72.445 | 6.906  | 1.00 36.09 | O |
| ATOM | 2191 | CB  | THR A 286 | 37.565 | 75.312 | 7.910  | 1.00 35.84 | C |
| ATOM | 2192 | OG1 | THR A 286 | 36.739 | 75.897 | 6.892  | 1.00 37.90 | O |
| ATOM | 2193 | CG2 | THR A 286 | 39.010 | 75.347 | 7.433  | 1.00 36.21 | C |
| ATOM | 2194 | N   | GLY A 287 | 36.544 | 72.829 | 6.037  | 1.00 37.15 | N |
| ATOM | 2195 | CA  | GLY A 287 | 36.842 | 71.981 | 4.889  | 1.00 38.34 | C |
| ATOM | 2196 | C   | GLY A 287 | 37.570 | 72.706 | 3.768  | 1.00 38.62 | C |
| ATOM | 2197 | O   | GLY A 287 | 38.368 | 72.118 | 3.022  | 1.00 39.65 | O |
| ATOM | 2198 | N   | THR A 288 | 37.315 | 74.001 | 3.664  | 1.00 38.53 | N |
| ATOM | 2199 | CA  | THR A 288 | 37.905 | 74.786 | 2.602  | 1.00 38.02 | C |
| ATOM | 2200 | C   | THR A 288 | 38.852 | 75.880 | 3.020  | 1.00 37.31 | C |
| ATOM | 2201 | O   | THR A 288 | 38.425 | 76.876 | 3.602  | 1.00 37.58 | O |
| ATOM | 2202 | CB  | THR A 288 | 36.785 | 75.425 | 1.786  | 1.00 38.60 | C |
| ATOM | 2203 | OG1 | THR A 288 | 35.864 | 74.398 | 1.381  | 1.00 39.40 | O |
| ATOM | 2204 | CG2 | THR A 288 | 37.352 | 76.109 | 0.549  | 1.00 38.86 | C |
| ATOM | 2205 | N   | PRO A 289 | 40.151 | 75.732 | 2.728  | 1.00 36.87 | N |
| ATOM | 2206 | CA  | PRO A 289 | 41.057 | 76.820 | 3.127  | 1.00 36.47 | C |
| ATOM | 2207 | C   | PRO A 289 | 40.585 | 78.092 | 2.436  | 1.00 36.26 | C |
| ATOM | 2208 | O   | PRO A 289 | 40.349 | 78.118 | 1.218  | 1.00 36.39 | O |
| ATOM | 2209 | CB  | PRO A 289 | 42.428 | 76.360 | 2.635  | 1.00 36.27 | C |
| ATOM | 2210 | CG  | PRO A 289 | 42.137 | 75.396 | 1.587  | 1.00 37.69 | C |
| ATOM | 2211 | CD  | PRO A 289 | 40.877 | 74.670 | 2.019  | 1.00 37.14 | C |
| ATOM | 2212 | N   | ASP A 290 | 40.437 | 79.147 | 3.215  | 1.00 36.17 | N |
| ATOM | 2213 | CA  | ASP A 290 | 39.927 | 80.398 | 2.682  | 1.00 35.63 | C |
| ATOM | 2214 | C   | ASP A 290 | 40.399 | 81.501 | 3.598  | 1.00 35.06 | C |
| ATOM | 2215 | O   | ASP A 290 | 39.934 | 81.592 | 4.713  | 1.00 34.16 | O |
| ATOM | 2216 | CB  | ASP A 290 | 38.400 | 80.343 | 2.675  | 1.00 36.85 | C |
| ATOM | 2217 | CG  | ASP A 290 | 37.752 | 81.670 | 2.203  | 1.00 38.51 | C |
| ATOM | 2218 | OD1 | ASP A 290 | 38.440 | 82.686 | 2.047  | 1.00 39.02 | O |
| ATOM | 2219 | OD2 | ASP A 290 | 36.536 | 81.693 | 1.997  | 1.00 40.14 | O |
| ATOM | 2220 | N   | LEU A 291 | 41.339 | 82.321 | 3.125  | 1.00 35.27 | N |
| ATOM | 2221 | CA  | LEU A 291 | 41.887 | 83.424 | 3.914  | 1.00 35.59 | C |
| ATOM | 2222 | C   | LEU A 291 | 40.827 | 84.402 | 4.409  | 1.00 35.86 | C |
| ATOM | 2223 | O   | LEU A 291 | 40.911 | 84.902 | 5.523  | 1.00 36.10 | O |
| ATOM | 2224 | CB  | LEU A 291 | 42.957 | 84.166 | 3.108  | 1.00 35.32 | C |
| ATOM | 2225 | CG  | LEU A 291 | 44.219 | 83.322 | 2.906  | 1.00 35.50 | C |
| ATOM | 2226 | CD1 | LEU A 291 | 45.199 | 84.010 | 1.946  | 1.00 34.91 | C |
| ATOM | 2227 | CD2 | LEU A 291 | 44.877 | 83.099 | 4.269  | 1.00 34.59 | C |
| ATOM | 2228 | N   | GLU A 292 | 39.820 | 84.676 | 3.595  | 1.00 36.64 | N |
| ATOM | 2229 | CA  | GLU A 292 | 38.771 | 85.599 | 4.034  | 1.00 37.40 | C |
| ATOM | 2230 | C   | GLU A 292 | 37.953 | 85.031 | 5.176  | 1.00 36.10 | C |
| ATOM | 2231 | O   | GLU A 292 | 37.672 | 85.738 | 6.156  | 1.00 35.05 | O |
| ATOM | 2232 | CB  | GLU A 292 | 37.824 | 85.955 | 2.890  | 1.00 39.68 | C |
| ATOM | 2233 | CG  | GLU A 292 | 37.882 | 87.421 | 2.497  | 1.00 43.89 | C |
| ATOM | 2234 | CD  | GLU A 292 | 38.010 | 88.399 | 3.697  | 1.00 46.28 | C |
| ATOM | 2235 | OE1 | GLU A 292 | 37.107 | 88.443 | 4.597  | 1.00 47.89 | O |
| ATOM | 2236 | OE2 | GLU A 292 | 39.035 | 89.139 | 3.729  | 1.00 47.25 | O |
| ATOM | 2237 | N   | ALA A 293 | 37.539 | 83.770 | 5.044  | 1.00 34.92 | N |
| ATOM | 2238 | CA  | ALA A 293 | 36.762 | 83.130 | 6.115  | 1.00 33.96 | C |
| ATOM | 2239 | C   | ALA A 293 | 37.614 | 83.084 | 7.389  | 1.00 33.25 | C |
| ATOM | 2240 | O   | ALA A 293 | 37.127 | 83.312 | 8.492  | 1.00 33.23 | O |
| ATOM | 2241 | CB  | ALA A 293 | 36.345 | 81.705 | 5.705  | 1.00 33.85 | C |
| ATOM | 2242 | N   | ALA A 294 | 38.891 | 82.770 | 7.234  | 1.00 33.18 | N |
| ATOM | 2243 | CA  | ALA A 294 | 39.797 | 82.728 | 8.387  | 1.00 33.18 | C |
| ATOM | 2244 | C   | ALA A 294 | 39.862 | 84.113 | 9.069  | 1.00 33.31 | C |
| ATOM | 2245 | O   | ALA A 294 | 39.911 | 84.225 | 10.298 | 1.00 32.21 | O |
| ATOM | 2246 | CB  | ALA A 294 | 41.187 | 82.331 | 7.922  | 1.00 31.96 | C |
| ATOM | 2247 | N   | ARG A 295 | 39.904 | 85.162 | 8.249  | 1.00 33.91 | N |
| ATOM | 2248 | CA  | ARG A 295 | 39.984 | 86.527 | 8.766  | 1.00 34.94 | C |

| ATOM | 2249 | C | ARG A 295 | 38.700 | 86.851 | 9.508 | 1.00 34.58 | C |
|------|------|------|-----------|--------|--------|--------|-----------|---|
| ATOM | 2250 | O | ARG A 295 | 38.722 | 87.449 | 10.585 | 1.00 34.47 | O |
| ATOM | 2251 | CB | ARG A 295 | 40.187 | 87.501 | 7.599 | 1.00 36.04 | C |
| ATOM | 2252 | CG | ARG A 295 | 40.188 | 88.990 | 7.955 | 1.00 39.48 | C |
| ATOM | 2253 | CD | ARG A 295 | 40.566 | 89.825 | 6.697 | 1.00 41.71 | C |
| ATOM | 2254 | NE | ARG A 295 | 41.965 | 89.579 | 6.289 | 1.00 45.12 | N |
| ATOM | 2255 | CZ | ARG A 295 | 42.365 | 89.050 | 5.115 | 1.00 47.03 | C |
| ATOM | 2256 | NH1 | ARG A 295 | 41.477 | 88.679 | 4.172 | 1.00 47.88 | N |
| ATOM | 2257 | NH2 | ARG A 295 | 43.675 | 88.890 | 4.870 | 1.00 47.46 | N |
| ATOM | 2258 | N | GLN A 296 | 37.574 | 86.443 | 8.940 | 1.00 34.57 | N |
| ATOM | 2259 | CA | GLN A 296 | 36.299 | 86.716 | 9.588 | 1.00 35.28 | C |
| ATOM | 2260 | C | GLN A 296 | 36.206 | 86.043 | 10.977 | 1.00 34.56 | C |
| ATOM | 2261 | O | GLN A 296 | 35.744 | 86.633 | 11.959 | 1.00 33.72 | O |
| ATOM | 2262 | CB | GLN A 296 | 35.149 | 86.254 | 8.691 | 1.00 37.10 | C |
| ATOM | 2263 | CG | GLN A 296 | 33.793 | 86.542 | 9.339 | 1.00 40.81 | C |
| ATOM | 2264 | CD | GLN A 296 | 32.592 | 85.995 | 8.564 | 1.00 42.68 | C |
| ATOM | 2265 | OE1 | GLN A 296 | 31.445 | 86.076 | 9.049 | 1.00 45.25 | O |
| ATOM | 2266 | NE2 | GLN A 296 | 32.831 | 85.447 | 7.376 | 1.00 43.21 | N |
| ATOM | 2267 | N | PHE A 297 | 36.662 | 84.797 | 11.058 | 1.00 33.92 | N |
| ATOM | 2268 | CA | PHE A 297 | 36.622 | 84.051 | 12.319 | 1.00 32.96 | C |
| ATOM | 2269 | C | PHE A 297 | 37.587 | 84.716 | 13.307 | 1.00 33.04 | C |
| ATOM | 2270 | O | PHE A 297 | 37.237 | 85.024 | 14.455 | 1.00 33.07 | O |
| ATOM | 2271 | CB | PHE A 297 | 37.048 | 82.590 | 12.058 | 1.00 32.48 | C |
| ATOM | 2272 | CG | PHE A 297 | 37.222 | 81.770 | 13.309 | 1.00 31.38 | C |
| ATOM | 2273 | CD1 | PHE A 297 | 36.128 | 81.458 | 14.112 | 1.00 31.25 | C |
| ATOM | 2274 | CD2 | PHE A 297 | 38.487 | 81.323 | 13.690 | 1.00 31.16 | C |
| ATOM | 2275 | CE1 | PHE A 297 | 36.288 | 80.709 | 15.287 | 1.00 30.75 | C |
| ATOM | 2276 | CE2 | PHE A 297 | 38.656 | 80.569 | 14.875 | 1.00 30.76 | C |
| ATOM | 2277 | CZ | PHE A 297 | 37.562 | 80.270 | 15.662 | 1.00 30.33 | C |
| ATOM | 2278 | N | SER A 298 | 38.805 | 84.946 | 12.850 | 1.00 33.28 | N |
| ATOM | 2279 | CA | SER A 298 | 39.826 | 85.545 | 13.684 | 1.00 34.79 | C |
| ATOM | 2280 | C | SER A 298 | 39.414 | 86.904 | 14.273 | 1.00 35.18 | C |
| ATOM | 2281 | O | SER A 298 | 39.513 | 87.155 | 15.479 | 1.00 35.16 | O |
| ATOM | 2282 | CB | SER A 298 | 41.096 | 85.723 | 12.860 | 1.00 35.36 | C |
| ATOM | 2283 | OG | SER A 298 | 42.027 | 86.415 | 13.667 | 1.00 38.06 | O |
| ATOM | 2284 | N | GLU A 299 | 38.929 | 87.785 | 13.406 | 1.00 36.07 | N |
| ATOM | 2285 | CA | GLU A 299 | 38.542 | 89.113 | 13.865 | 1.00 36.59 | C |
| ATOM | 2286 | C | GLU A 299 | 37.343 | 89.065 | 14.815 | 1.00 36.14 | C |
| ATOM | 2287 | O | GLU A 299 | 37.299 | 89.795 | 15.807 | 1.00 35.85 | O |
| ATOM | 2288 | CB | GLU A 299 | 38.272 | 90.018 | 12.647 | 1.00 37.37 | C |
| ATOM | 2289 | CG | GLU A 299 | 39.551 | 90.221 | 11.831 | 1.00 40.43 | C |
| ATOM | 2290 | CD | GLU A 299 | 39.437 | 91.309 | 10.765 | 1.00 42.32 | C |
| ATOM | 2291 | OE1 | GLU A 299 | 38.310 | 91.789 | 10.515 | 1.00 43.83 | O |
| ATOM | 2292 | OE2 | GLU A 299 | 40.477 | 91.676 | 10.173 | 1.00 43.67 | O |
| ATOM | 2293 | N | ALA A 300 | 36.381 | 88.192 | 14.530 | 1.00 35.68 | N |
| ATOM | 2294 | CA | ALA A 300 | 35.203 | 88.083 | 15.385 | 1.00 35.16 | C |
| ATOM | 2295 | C | ALA A 300 | 35.580 | 87.621 | 16.808 | 1.00 35.19 | C |
| ATOM | 2296 | O | ALA A 300 | 35.076 | 88.158 | 17.804 | 1.00 34.89 | O |
| ATOM | 2297 | CB | ALA A 300 | 34.192 | 87.130 | 14.748 | 1.00 35.33 | C |
| ATOM | 2298 | N | VAL A 301 | 36.487 | 86.643 | 16.914 | 1.00 34.89 | N |
| ATOM | 2299 | CA | VAL A 301 | 36.934 | 86.154 | 18.218 | 1.00 33.84 | C |
| ATOM | 2300 | C | VAL A 301 | 37.863 | 87.185 | 18.900 | 1.00 34.50 | C |
| ATOM | 2301 | O | VAL A 301 | 37.773 | 87.432 | 20.109 | 1.00 34.02 | O |
| ATOM | 2302 | CB | VAL A 301 | 37.753 | 84.819 | 18.092 | 1.00 33.28 | C |
| ATOM | 2303 | CG1 | VAL A 301 | 38.318 | 84.441 | 19.445 | 1.00 31.88 | C |
| ATOM | 2304 | CG2 | VAL A 301 | 36.883 | 83.704 | 17.508 | 1.00 32.53 | C |
| ATOM | 2305 | N | LYS A 302 | 38.771 | 87.776 | 18.138 | 1.00 35.31 | N |
| ATOM | 2306 | CA | LYS A 302 | 39.682 | 88.723 | 18.760 | 1.00 36.84 | C |
| ATOM | 2307 | C | LYS A 302 | 38.997 | 90.032 | 19.189 | 1.00 37.64 | C |
| ATOM | 2308 | O | LYS A 302 | 39.526 | 90.741 | 20.040 | 1.00 37.45 | O |
| ATOM | 2309 | CB | LYS A 302 | 40.877 | 88.997 | 17.852 | 1.00 36.98 | C |
| ATOM | 2310 | CG | LYS A 302 | 41.920 | 87.879 | 17.870 | 1.00 37.77 | C |
| ATOM | 2311 | CD | LYS A 302 | 43.113 | 88.237 | 16.995 | 1.00 38.07 | C |
| ATOM | 2312 | CE | LYS A 302 | 44.273 | 87.272 | 17.192 | 1.00 38.69 | C |
| ATOM | 2313 | NZ | LYS A 302 | 44.761 | 87.117 | 18.618 | 1.00 38.89 | N |
| ATOM | 2314 | N | ALA A 303 | 37.825 | 90.328 | 18.625 | 1.00 38.44 | N |
| ATOM | 2315 | CA | ALA A 303 | 37.072 | 91.528 | 19.013 | 1.00 39.26 | C |
| ATOM | 2316 | C | ALA A 303 | 36.646 | 91.375 | 20.471 | 1.00 40.41 | C |
| ATOM | 2317 | O | ALA A 303 | 36.414 | 92.361 | 21.191 | 1.00 40.47 | O |
| ATOM | 2318 | CB | ALA A 303 | 35.846 | 91.668 | 18.155 | 1.00 38.51 | C |
| ATOM | 2319 | N | GLU A 304 | 36.520 | 90.122 | 20.896 | 1.00 40.72 | N |
| ATOM | 2320 | CA | GLU A 304 | 36.111 | 89.789 | 22.255 | 1.00 41.14 | C |
| ATOM | 2321 | C | GLU A 304 | 37.333 | 89.438 | 23.093 | 1.00 40.32 | C |
| ATOM | 2322 | O | GLU A 304 | 37.440 | 89.826 | 24.255 | 1.00 39.98 | O |
| ATOM | 2323 | CB | GLU A 304 | 35.183 | 88.585 | 22.195 | 1.00 43.75 | C |
| ATOM | 2324 | CG | GLU A 304 | 34.137 | 88.540 | 23.227 | 1.00 47.35 | C |
| ATOM | 2325 | CD | GLU A 304 | 33.327 | 89.807 | 23.230 | 1.00 50.01 | C |
| ATOM | 2326 | OE1 | GLU A 304 | 32.886 | 90.241 | 22.142 | 1.00 51.77 | O |
| ATOM | 2327 | OE2 | GLU A 304 | 33.132 | 90.378 | 24.329 | 1.00 51.72 | O |
| ATOM | 2328 | N | TYR A 305 | 38.257 | 88.689 | 22.490 | 1.00 39.08 | N |

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ATOM   2329  CA   TYR A 305     39.480  88.227  23.167  1.00 37.98           C
ATOM   2330  C    TYR A 305     40.673  88.548  22.307  1.00 37.83           C
ATOM   2331  O    TYR A 305     41.223  87.665  21.631  1.00 36.81           O
ATOM   2332  CB   TYR A 305     39.408  86.718  23.380  1.00 37.61           C
ATOM   2333  CG   TYR A 305     38.325  86.319  24.343  1.00 37.17           C
ATOM   2334  CD1  TYR A 305     38.535  86.394  25.705  1.00 37.89           C
ATOM   2335  CD2  TYR A 305     37.071  85.924  23.896  1.00 37.52           C
ATOM   2336  CE1  TYR A 305     37.519  86.088  26.616  1.00 38.21           C
ATOM   2337  CE2  TYR A 305     36.043  85.617  24.804  1.00 37.98           C
ATOM   2338  CZ   TYR A 305     36.288  85.706  26.154  1.00 38.08           C
ATOM   2339  OH   TYR A 305     35.301  85.443  27.073  1.00 39.97           O
ATOM   2340  N    PRO A 306     41.094  89.827  22.315  1.00 37.64           N
ATOM   2341  CA   PRO A 306     42.232  90.282  21.521  1.00 37.29           C
ATOM   2342  C    PRO A 306     43.487  89.444  21.570  1.00 36.26           C
ATOM   2343  O    PRO A 306     44.162  89.313  20.563  1.00 35.91           O
ATOM   2344  CB   PRO A 306     42.474  91.721  22.028  1.00 37.32           C
ATOM   2345  CG   PRO A 306     41.843  91.745  23.381  1.00 37.92           C
ATOM   2346  CD   PRO A 306     40.595  90.924  23.169  1.00 37.98           C
ATOM   2347  N    ASP A 307     43.807  88.880  22.726  1.00 35.81           N
ATOM   2348  CA   ASP A 307     45.035  88.097  22.823  1.00 36.03           C
ATOM   2349  C    ASP A 307     44.848  86.586  22.594  1.00 35.12           C
ATOM   2350  O    ASP A 307     45.789  85.798  22.789  1.00 34.54           O
ATOM   2351  CB   ASP A 307     45.686  88.315  24.190  1.00 37.63           C
ATOM   2352  CG   ASP A 307     46.032  89.790  24.442  1.00 39.34           C
ATOM   2353  OD1  ASP A 307     46.558  90.444  23.524  1.00 39.57           O
ATOM   2354  OD2  ASP A 307     45.767  90.271  25.559  1.00 40.79           O
ATOM   2355  N    GLN A 308     43.652  86.179  22.198  1.00 33.37           N
ATOM   2356  CA   GLN A 308     43.424  84.745  21.976  1.00 32.75           C
ATOM   2357  C    GLN A 308     44.189  84.192  20.772  1.00 32.13           C
ATOM   2358  O    GLN A 308     43.955  84.624  19.644  1.00 32.10           O
ATOM   2359  CB   GLN A 308     41.933  84.469  21.781  1.00 32.25           C
ATOM   2360  CG   GLN A 308     41.594  82.962  21.655  1.00 31.32           C
ATOM   2361  CD   GLN A 308     42.117  82.159  22.847  1.00 31.01           C
ATOM   2362  OE1  GLN A 308     43.054  81.332  22.715  1.00 31.74           O
ATOM   2363  NE2  GLN A 308     41.537  82.396  24.006  1.00 28.83           N
ATOM   2364  N    MET A 309     45.107  83.248  20.999  1.00 31.67           N
ATOM   2365  CA   MET A 309     45.825  82.636  19.873  1.00 30.56           C
ATOM   2366  C    MET A 309     44.912  81.571  19.262  1.00 30.31           C
ATOM   2367  O    MET A 309     44.067  80.970  19.959  1.00 29.92           O
ATOM   2368  CB   MET A 309     47.138  81.994  20.311  1.00 30.59           C
ATOM   2369  CG   MET A 309     48.132  82.994  20.811  1.00 32.58           C
ATOM   2370  SD   MET A 309     49.755  82.280  21.145  1.00 34.43           S
ATOM   2371  CE   MET A 309     49.470  81.386  22.718  1.00 33.03           C
ATOM   2372  N    LEU A 310     45.099  81.333  17.970  1.00 28.88           N
ATOM   2373  CA   LEU A 310     44.264  80.396  17.249  1.00 28.68           C
ATOM   2374  C    LEU A 310     45.148  79.376  16.558  1.00 28.13           C
ATOM   2375  O    LEU A 310     46.343  79.630  16.347  1.00 27.95           O
ATOM   2376  CB   LEU A 310     43.435  81.154  16.191  1.00 28.12           C
ATOM   2377  CG   LEU A 310     42.690  82.389  16.723  1.00 29.39           C
ATOM   2378  CD1  LEU A 310     42.196  83.263  15.542  1.00 28.80           C
ATOM   2379  CD2  LEU A 310     41.501  81.934  17.585  1.00 28.63           C
ATOM   2380  N    ALA A 311     44.554  78.236  16.196  1.00 27.62           N
ATOM   2381  CA   ALA A 311     45.282  77.175  15.496  1.00 26.82           C
ATOM   2382  C    ALA A 311     44.533  76.932  14.191  1.00 26.54           C
ATOM   2383  O    ALA A 311     43.319  77.109  14.124  1.00 27.08           O
ATOM   2384  CB   ALA A 311     45.320  75.906  16.353  1.00 26.55           C
ATOM   2385  N    TYR A 312     45.238  76.478  13.163  1.00 26.94           N
ATOM   2386  CA   TYR A 312     44.591  76.275  11.878  1.00 26.83           C
ATOM   2387  C    TYR A 312     45.130  75.038  11.156  1.00 26.86           C
ATOM   2388  O    TYR A 312     46.340  74.889  11.020  1.00 26.59           O
ATOM   2389  CB   TYR A 312     44.842  77.537  11.024  1.00 27.42           C
ATOM   2390  CG   TYR A 312     44.094  77.591   9.723  1.00 27.68           C
ATOM   2391  CD1  TYR A 312     44.516  76.862   8.609  1.00 28.90           C
ATOM   2392  CD2  TYR A 312     42.940  78.359   9.613  1.00 28.98           C
ATOM   2393  CE1  TYR A 312     43.781  76.903   7.394  1.00 29.48           C
ATOM   2394  CE2  TYR A 312     42.205  78.404   8.430  1.00 29.90           C
ATOM   2395  CZ   TYR A 312     42.626  77.679   7.338  1.00 30.18           C
ATOM   2396  OH   TYR A 312     41.855  77.719   6.211  1.00 32.61           O
ATOM   2397  N    ASN A 313     44.247  74.151  10.701  1.00 27.19           N
ATOM   2398  CA   ASN A 313     44.699  72.972   9.941  1.00 28.08           C
ATOM   2399  C    ASN A 313     44.563  73.328   8.474  1.00 27.44           C
ATOM   2400  O    ASN A 313     43.481  73.770   8.037  1.00 27.13           O
ATOM   2401  CB   ASN A 313     43.832  71.705  10.177  1.00 29.00           C
ATOM   2402  CG   ASN A 313     44.335  70.493   9.321  1.00 31.50           C
ATOM   2403  OD1  ASN A 313     45.544  70.341   9.119  1.00 31.52           O
ATOM   2404  ND2  ASN A 313     43.415  69.655   8.817  1.00 31.28           N
ATOM   2405  N    CYS A 314     45.641  73.159   7.721  1.00 27.48           N
ATOM   2406  CA   CYS A 314     45.612  73.425   6.285  1.00 27.81           C
ATOM   2407  C    CYS A 314     45.196  72.110   5.648  1.00 28.43           C
ATOM   2408  O    CYS A 314     45.970  71.147   5.622  1.00 27.89           O
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ATOM   2409  CB  CYS A 314      46.993  73.849   5.811  1.00 29.00           C
ATOM   2410  SG  CYS A 314      47.504  75.409   6.613  1.00 30.48           S
ATOM   2411  N   SER A 315      43.974  72.091   5.120  1.00 29.32           N
ATOM   2412  CA  SER A 315      43.377  70.882   4.541  1.00 30.48           C
ATOM   2413  C   SER A 315      44.233  70.043   3.598  1.00 30.10           C
ATOM   2414  O   SER A 315      44.688  70.523   2.560  1.00 30.36           O
ATOM   2415  CB  SER A 315      42.057  71.214   3.837  1.00 31.59           C
ATOM   2416  OG  SER A 315      41.553  70.014   3.231  1.00 33.89           O
ATOM   2417  N   PRO A 316      44.484  68.770   3.968  1.00 29.59           N
ATOM   2418  CA  PRO A 316      45.294  67.904   3.119  1.00 29.89           C
ATOM   2419  C   PRO A 316      44.536  67.383   1.900  1.00 30.79           C
ATOM   2420  O   PRO A 316      45.154  66.960   0.912  1.00 31.00           O
ATOM   2421  CB  PRO A 316      45.712  66.764   4.067  1.00 29.43           C
ATOM   2422  CG  PRO A 316      44.578  66.668   5.002  1.00 29.30           C
ATOM   2423  CD  PRO A 316      44.222  68.141   5.275  1.00 29.30           C
ATOM   2424  N   SER A 317      43.209  67.395   1.981  1.00 31.43           N
ATOM   2425  CA  SER A 317      42.385  66.880   0.901  1.00 32.47           C
ATOM   2426  C   SER A 317      41.914  67.918  -0.118  1.00 33.27           C
ATOM   2427  O   SER A 317      41.556  67.555  -1.253  1.00 33.60           O
ATOM   2428  CB  SER A 317      41.163  66.196   1.473  1.00 32.12           C
ATOM   2429  OG  SER A 317      40.462  67.120   2.263  1.00 33.44           O
ATOM   2430  N   PHE A 318      41.891  69.184   0.286  1.00 33.30           N
ATOM   2431  CA  PHE A 318      41.488  70.271  -0.590  1.00 33.71           C
ATOM   2432  C   PHE A 318      42.454  70.274  -1.785  1.00 34.55           C
ATOM   2433  O   PHE A 318      43.683  70.161  -1.592  1.00 33.93           O
ATOM   2434  CB  PHE A 318      41.612  71.604   0.168  1.00 34.23           C
ATOM   2435  CG  PHE A 318      41.211  72.816  -0.642  1.00 35.53           C
ATOM   2436  CD1 PHE A 318      39.872  73.050  -0.950  1.00 35.95           C
ATOM   2437  CD2 PHE A 318      42.157  73.759  -1.026  1.00 35.67           C
ATOM   2438  CE1 PHE A 318      39.467  74.225  -1.635  1.00 37.17           C
ATOM   2439  CE2 PHE A 318      41.765  74.947  -1.709  1.00 36.72           C
ATOM   2440  CZ  PHE A 318      40.425  75.180  -2.013  1.00 35.87           C
ATOM   2441  N   ASN A 319      41.909  70.402  -3.002  1.00 34.29           N
ATOM   2442  CA  ASN A 319      42.717  70.441  -4.234  1.00 35.17           C
ATOM   2443  C   ASN A 319      43.263  71.878  -4.325  1.00 35.74           C
ATOM   2444  O   ASN A 319      42.669  72.759  -4.962  1.00 36.71           O
ATOM   2445  CB  ASN A 319      41.810  70.102  -5.419  1.00 34.81           C
ATOM   2446  CG  ASN A 319      42.567  69.882  -6.738  1.00 35.70           C
ATOM   2447  OD1 ASN A 319      42.045  69.189  -7.630  1.00 36.40           O
ATOM   2448  ND2 ASN A 319      43.750  70.470  -6.889  1.00 33.18           N
ATOM   2449  N   TRP A 320      44.409  72.104  -3.705  1.00 35.39           N
ATOM   2450  CA  TRP A 320      44.964  73.445  -3.656  1.00 35.82           C
ATOM   2451  C   TRP A 320      45.186  74.136  -4.999  1.00 37.17           C
ATOM   2452  O   TRP A 320      44.651  75.216  -5.231  1.00 37.61           O
ATOM   2453  CB  TRP A 320      46.277  73.448  -2.857  1.00 34.28           C
ATOM   2454  CG  TRP A 320      46.084  73.091  -1.411  1.00 32.97           C
ATOM   2455  CD1 TRP A 320      45.889  71.850  -0.900  1.00 32.55           C
ATOM   2456  CD2 TRP A 320      46.002  74.000  -0.300  1.00 32.53           C
ATOM   2457  NE1 TRP A 320      45.680  71.915   0.465  1.00 31.94           N
ATOM   2458  CE2 TRP A 320      45.746  73.222   0.860  1.00 32.12           C
ATOM   2459  CE3 TRP A 320      46.116  75.392  -0.172  1.00 32.34           C
ATOM   2460  CZ2 TRP A 320      45.603  73.787   2.134  1.00 32.34           C
ATOM   2461  CZ3 TRP A 320      45.974  75.962   1.099  1.00 32.52           C
ATOM   2462  CH2 TRP A 320      45.720  75.155   2.238  1.00 32.01           C
ATOM   2463  N   LYS A 321      45.975  73.527  -5.869  1.00 38.20           N
ATOM   2464  CA  LYS A 321      46.297  74.152  -7.144  1.00 40.01           C
ATOM   2465  C   LYS A 321      45.084  74.358  -8.050  1.00 40.24           C
ATOM   2466  O   LYS A 321      45.093  75.253  -8.901  1.00 40.84           O
ATOM   2467  CB  LYS A 321      47.401  73.350  -7.849  1.00 41.44           C
ATOM   2468  CG  LYS A 321      47.722  73.865  -9.254  1.00 44.41           C
ATOM   2469  CD  LYS A 321      48.944  73.224  -9.894  1.00 45.86           C
ATOM   2470  CE  LYS A 321      50.197  73.838  -9.331  1.00 47.37           C
ATOM   2471  NZ  LYS A 321      50.261  73.523  -7.865  1.00 48.02           N
ATOM   2472  N   LYS A 322      44.036  73.554  -7.868  1.00 39.89           N
ATOM   2473  CA  LYS A 322      42.837  73.706  -8.684  1.00 39.94           C
ATOM   2474  C   LYS A 322      42.077  74.969  -8.294  1.00 40.16           C
ATOM   2475  O   LYS A 322      41.469  75.648  -9.147  1.00 40.21           O
ATOM   2476  CB  LYS A 322      41.905  72.506  -8.504  1.00 40.33           C
ATOM   2477  CG  LYS A 322      40.596  72.619  -9.284  1.00 41.10           C
ATOM   2478  CD  LYS A 322      39.713  71.391  -9.069  1.00 41.42           C
ATOM   2479  CE  LYS A 322      38.410  71.523  -9.850  1.00 42.77           C
ATOM   2480  NZ  LYS A 322      37.488  70.349  -9.659  1.00 43.40           N
ATOM   2481  N   HIS A 323      42.123  75.297  -7.007  1.00 39.35           N
ATOM   2482  CA  HIS A 323      41.386  76.442  -6.519  1.00 39.05           C
ATOM   2483  C   HIS A 323      42.175  77.687  -6.190  1.00 38.44           C
ATOM   2484  O   HIS A 323      41.603  78.777  -6.133  1.00 38.80           O
ATOM   2485  CB  HIS A 323      40.573  76.020  -5.308  1.00 39.59           C
ATOM   2486  CG  HIS A 323      39.642  74.892  -5.599  1.00 41.25           C
ATOM   2487  ND1 HIS A 323      38.554  75.027  -6.437  1.00 41.66           N
ATOM   2488  CD2 HIS A 323      39.659  73.592  -5.210  1.00 41.76           C
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ATOM   2489  CE1 HIS A 323      37.939  73.861  -6.550  1.00 42.29           C
ATOM   2490  NE2 HIS A 323      38.588  72.973  -5.814  1.00 42.06           N
ATOM   2491  N   LEU A 324      43.477  77.564  -5.986  1.00 37.46           N
ATOM   2492  CA  LEU A 324      44.248  78.749  -5.633  1.00 37.01           C
ATOM   2493  C   LEU A 324      45.438  78.872  -6.552  1.00 37.50           C
ATOM   2494  O   LEU A 324      45.904  77.868  -7.108  1.00 37.63           O
ATOM   2495  CB  LEU A 324      44.708  78.654  -4.170  1.00 36.24           C
ATOM   2496  CG  LEU A 324      43.612  78.437  -3.111  1.00 36.49           C
ATOM   2497  CD1 LEU A 324      44.248  78.146  -1.760  1.00 36.33           C
ATOM   2498  CD2.LEU A 324      42.728  79.670  -2.996  1.00 35.86           C
ATOM   2499  N   ASP A 325      45.914  80.103  -6.739  1.00 37.95           N
ATOM   2500  CA  ASP A 325      47.078  80.311  -7.578  1.00 39.05           C
ATOM   2501  C   ASP A 325      48.287  80.066  -6.722  1.00 38.77           C
ATOM   2502  O   ASP A 325      48.193  80.053  -5.483  1.00 38.81           O
ATOM   2503  CB  ASP A 325      47.128  81.740  -8.164  1.00 40.82           C
ATOM   2504  CG  ASP A 325      46.824  82.810  -7.140  1.00 42.08           C
ATOM   2505  OD1 ASP A 325      47.463  82.824  -6.060  1.00 42.93           O
ATOM   2506  OD2 ASP A 325      45.940  83.654  -7.434  1.00 44.32           O
ATOM   2507  N   ASP A 326      49.424  79.879  -7.378  1.00 38.71           N
ATOM   2508  CA  ASP A 326      50.643  79.621  -6.663  1.00 38.63           C
ATOM   2509  C   ASP A 326      51.000  80.713  -5.682  1.00 38.08           C
ATOM   2510  O   ASP A 326      51.571  80.432  -4.632  1.00 37.26           O
ATOM   2511  CB  ASP A 326      51.790  79.397  -7.637  1.00 40.37           C
ATOM   2512  CG  ASP A 326      51.607  78.134  -8.447  1.00 42.08           C
ATOM   2513  OD1 ASP A 326      50.885  77.218  -7.987  1.00 43.03           O
ATOM   2514  OD2 ASP A 326      52.188  78.044  -9.540  1.00 44.19           O
ATOM   2515  N   ALA A 327      50.668  81.960  -6.009  1.00 36.83           N
ATOM   2516  CA  ALA A 327      51.006  83.048  -5.099  1.00 35.67           C
ATOM   2517  C   ALA A 327      50.207  82.941  -3.807  1.00 34.89           C
ATOM   2518  O   ALA A 327      50.750  83.124  -2.715  1.00 34.94           O
ATOM   2519  CB  ALA A 327      50.734  84.414  -5.779  1.00 37.19           C
ATOM   2520  N   THR A 328      48.916  82.648  -3.929  1.00 33.81           N
ATOM   2521  CA  THR A 328      48.076  82.549  -2.757  1.00 33.35           C
ATOM   2522  C   THR A 328      48.509  81.360  -1.889  1.00 32.88           C
ATOM   2523  O   THR A 328      48.507  81.450  -0.658  1.00 32.95           O
ATOM   2524  CB  THR A 328      46.598  82.457  -3.184  1.00 34.58           C
ATOM   2525  OG1 THR A 328      46.249  83.674  -3.860  1.00 34.68           O
ATOM   2526  CG2 THR A 328      45.667  82.292  -1.969  1.00 34.11           C
ATOM   2527  N   ILE A 329      48.930  80.277  -2.541  1.00 32.05           N
ATOM   2528  CA  ILE A 329      49.395  79.072  -1.851  1.00 31.15           C
ATOM   2529  C   ILE A 329      50.688  79.390  -1.119  1.00 31.43           C
ATOM   2530  O   ILE A 329      50.894  78.991   0.037  1.00 31.26           O
ATOM   2531  CB  ILE A 329      49.650  77.950  -2.868  1.00 29.98           C
ATOM   2532  CG1 ILE A 329      48.318  77.468  -3.432  1.00 29.91           C
ATOM   2533  CG2 ILE A 329      50.415  76.756  -2.211  1.00 31.39           C
ATOM   2534  CD1 ILE A 329      48.441  76.695  -4.773  1.00 29.59           C
ATOM   2535  N   ALA A 330      51.561  80.144  -1.786  1.00 31.45           N
ATOM   2536  CA  ALA A 330      52.843  80.482  -1.202  1.00 31.59           C
ATOM   2537  C   ALA A 330      52.751  81.382   0.027  1.00 32.09           C
ATOM   2538  O   ALA A 330      53.562  81.262   0.941  1.00 32.19           O
ATOM   2539  CB  ALA A 330      53.733  81.132  -2.262  1.00 31.84           C
ATOM   2540  N   LYS A 331      51.759  82.269   0.059  1.00 32.01           N
ATOM   2541  CA  LYS A 331      51.620  83.196   1.175  1.00 32.77           C
ATOM   2542  C   LYS A 331      50.614  82.753   2.257  1.00 32.13           C
ATOM   2543  O   LYS A 331      50.521  83.387   3.316  1.00 31.60           O
ATOM   2544  CB  LYS A 331      51.147  84.558   0.653  1.00 33.48           C
ATOM   2545  CG  LYS A 331      49.652  84.551   0.296  1.00 34.68           C
ATOM   2546  CD  LYS A 331      49.173  85.918  -0.222  1.00 36.45           C
ATOM   2547  CE  LYS A 331      47.671  85.883  -0.511  1.00 37.57           C
ATOM   2548  NZ  LYS A 331      47.201  87.043  -1.339  1.00 38.44           N
ATOM   2549  N   PHE A 332      49.857  81.694   1.969  1.00 31.99           N
ATOM   2550  CA  PHE A 332      48.799  81.220   2.864  1.00 31.74           C
ATOM   2551  C   PHE A 332      49.112  81.193   4.378  1.00 31.28           C
ATOM   2552  O   PHE A 332      48.450  81.863   5.172  1.00 31.04           O
ATOM   2553  CB  PHE A 332      48.296  79.847   2.359  1.00 32.81           C
ATOM   2554  CG  PHE A 332      46.901  79.525   2.808  1.00 33.89           C
ATOM   2555  CD1 PHE A 332      45.808  80.134   2.203  1.00 34.41           C
ATOM   2556  CD2 PHE A 332      46.683  78.663   3.876  1.00 34.72           C
ATOM   2557  CE1 PHE A 332      44.504  79.902   2.651  1.00 34.48           C
ATOM   2558  CE2 PHE A 332      45.382  78.417   4.335  1.00 34.84           C
ATOM   2559  CZ  PHE A 332      44.289  79.048   3.710  1.00 34.33           C
ATOM   2560  N   GLN A 333      50.118  80.445   4.807  1.00 31.85           N
ATOM   2561  CA  GLN A 333      50.416  80.404   6.246  1.00 31.77           C
ATOM   2562  C   GLN A 333      50.901  81.765   6.833  1.00 32.55           C
ATOM   2563  O   GLN A 333      50.571  82.155   7.964  1.00 31.94           O
ATOM   2564  CB  GLN A 333      51.462  79.321   6.524  1.00 31.35           C
ATOM   2565  CG  GLN A 333      50.969  77.898   6.221  1.00 30.80           C
ATOM   2566  CD  GLN A 333      51.696  76.823   7.040  1.00 31.57           C
ATOM   2567  OE1 GLN A 333      52.760  77.061   7.651  1.00 29.83           O
ATOM   2568  NE2 GLN A 333      51.126  75.612   7.034  1.00 32.08           N
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| ATOM | 2569 | N | LYS | A 334 | 51.705 | 82.474 | 6.060 | 1.00 | 33.49 | N |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 2570 | CA | LYS | A 334 | 52.224 | 83.769 | 6.489 | 1.00 | 34.39 | C |
| ATOM | 2571 | C | LYS | A 334 | 51.024 | 84.682 | 6.783 | 1.00 | 34.06 | C |
| ATOM | 2572 | O | LYS | A 334 | 50.924 | 85.324 | 7.831 | 1.00 | 33.29 | O |
| ATOM | 2573 | CB | LYS | A 334 | 53.111 | 84.323 | 5.354 | 1.00 | 35.91 | C |
| ATOM | 2574 | CG | LYS | A 334 | 53.755 | 85.699 | 5.576 | 1.00 | 39.08 | C |
| ATOM | 2575 | CD | LYS | A 334 | 54.189 | 85.921 | 7.020 | 1.00 | 41.44 | C |
| ATOM | 2576 | CE | LYS | A 334 | 53.080 | 86.683 | 7.816 | 1.00· | 43.26 | C |
| ATOM | 2577 | NZ | LYS | A 334 | 53.151 | 86.788 | 9.322 | 1.00 | 41.76 | N |
| ATOM | 2578 | N | GLU | A 335 | 50.091 | 84.684 | 5.849 | 1.00 | 34.09 | N |
| ATOM | 2579 | CA | GLU | A 335 | 48.898 | 85.493 | 5.955 | 1.00 | 34.79 | C |
| ATOM | 2580 | C | GLU | A 335 | 48.088 | 85.082 | 7.196 | 1.00 | 33.88 | C |
| ATOM | 2581 | O | GLU | A 335 | 47.611 | 85.922 | 7.966 | 1.00 | 33.39 | O |
| ATOM | 2582 | CB | GLU | A 335 | 48.081 | 85.287 | 4.689 | 1.00 | 37.19 | C |
| ATOM | 2583 | CG | GLU | A 335 | 47.166 | 86.400 | 4.360 | 1.00 | 42.12 | C |
| ATOM | 2584 | CD | GLU | A 335 | 47.779 | 87.386 | 3.368 | 1.00 | 44.34 | C |
| ATOM | 2585 | OE1 | GLU | A 335 | 48.995 | 87.717 | 3.498 | 1.00 | 45.33 | O |
| ATOM | 2586 | OE2 | GLU | A 335 | 47.021 | 87.826 | 2.467 | 1.00 | 45.66 | O |
| ATOM | 2587 | N | LEU | A 336 | 47.924 | 83.778 | 7.391 | 1.00 | 32.42 | N |
| ATOM | 2588 | CA | LEU | A 336 | 47.181 | 83.293 | 8.554 | 1.00 | 31.12 | C |
| ATOM | 2589 | C | LEU | A 336 | 47.878 | 83.708 | 9.836 | 1.00 | 30.63 | C |
| ATOM | 2590 | O | LEU | A 336 | 47.229 | 84.097 | 10.811 | 1.00 | 31.12 | O |
| ATOM | 2591 | CB | LEU | A 336 | 47.060 | 81.748 | 8.502 | 1.00 | 30.63 | C |
| ATOM | 2592 | CG | LEU | A 336 | 46.081 | 81.189 | 7.461 | 1.00 | 31.45 | C |
| ATOM | 2593 | CD1 | LEU | A 336 | 46.179 | 79.664 | 7.429 | 1.00 | 31.96 | C |
| ATOM | 2594 | CD2 | LEU | A 336 | 44.651 | 81.630 | 7.782 | 1.00 | 30.69 | C |
| ATOM | 2595 | N | ALA | A 337 | 49.198 | 83.621 | 9.854 | 1.00 | 30.12 | N |
| ATOM | 2596 | CA | ALA | A 337 | 49.938 | 83.962 | 11.062 | 1.00 | 31.09 | C |
| ATOM | 2597 | C | ALA | A 337 | 49.675 | 85.400 | 11.504 | 1.00 | 31.81 | C |
| ATOM | 2598 | O | ALA | A 337 | 49.645 | 85.702 | 12.701 | 1.00 | 31.15 | O |
| ATOM | 2599 | CB | ALA | A 337 | 51.417 | 83.761 | 10.828 | 1.00 | 30.89 | C |
| ATOM | 2600 | N | ALA | A 338 | 49.491 | 86.269 | 10.519 | 1.00 | 32.33 | N |
| ATOM | 2601 | CA | ALA | A 338 | 49.244 | 87.678 | 10.768 | 1.00 | 33.18 | C |
| ATOM | 2602 | C | ALA | A 338 | 47.864 | 87.877 | 11.376 | 1.00 | 34.08 | C |
| ATOM | 2603 | O | ALA | A 338 | 47.614 | 88.884 | 12.051 | 1.00 | 34.96 | O |
| ATOM | 2604 | CB | ALA | A 338 | 49.392 | 88.471 | 9.439 | 1.00 | 32.95 | C |
| ATOM | 2605 | N | MET | A 339 | 46.964 | 86.917 | 11.154 | 1.00 | 33.97 | N |
| ATOM | 2606 | CA | MET | A 339 | 45.620 | 86.984 | 11.720 | 1.00 | 33.44 | C |
| ATOM | 2607 | C | MET | A 339 | 45.589 | 86.401 | 13.135 | 1.00 | 33.00 | C |
| ATOM | 2608 | O | MET | A 339 | 44.575 | 86.484 | 13.826 | 1.00 | 33.47 | O |
| ATOM | 2609 | CB | MET | A 339 | 44.631 | 86.212 | 10.854 | 1.00 | 33.99 | C |
| ATOM | 2610 | CG | MET | A 339 | 44.381 | 86.811 | 9.491 | 1.00 | 35.43 | C |
| ATOM | 2611 | SD | MET | A 339 | 43.411 | 85.633 | 8.532 | 1.00 | 37.01 | S |
| ATOM | 2612 | CE | MET | A 339 | 43.928 | 86.028 | 6.875 | 1.00 | 36.83 | C |
| ATOM | 2613 | N | GLY | A 340 | 46.692 | 85.818 | 13.583 | 1.00 | 32.29 | N |
| ATOM | 2614 | CA | GLY | A 340 | 46.684 | 85.256 | 14.923 | 1.00 | 32.03 | C |
| ATOM | 2615 | C | GLY | A 340 | 46.647 | 83.723 | 14.966 | 1.00 | 31.37 | C |
| ATOM | 2616 | O | GLY | A 340 | 46.526 | 83.145 | 16.041 | 1.00 | 31.88 | O |
| ATOM | 2617 | N | PHE | A 341 | 46.727 | 83.063 | 13.818 | 1.00 | 30.42 | N |
| ATOM | 2618 | CA | PHE | A 341 | 46.762 | 81.591 | 13.804 | 1.00 | 29.85 | C |
| ATOM | 2619 | C | PHE | A 341 | 48.225 | 81.256 | 14.031 | 1.00 | 29.55 | C |
| ATOM | 2620 | O | PHE | A 341 | 49.006 | 81.160 | 13.076 | 1.00 | 29.89 | O |
| ATOM | 2621 | CB | PHE | A 341 | 46.279 | 81.063 | 12.458 | 1.00 | 28.43 | C |
| ATOM | 2622 | CG | PHE | A 341 | 44.822 | 81.331 | 12.215 | 1.00 | 29.33 | C |
| ATOM | 2623 | CD1 | PHE | A 341 | 43.835 | 80.526 | 12.796 | 1.00 | 29.10 | C |
| ATOM | 2624 | CD2 | PHE | A 341 | 44.425 | 82.417 | 11.441 | 1.00 | 29.30 | C |
| ATOM | 2625 | CE1 | PHE | A 341 | 42.477 | 80.796 | 12.606 | 1.00 | 28.94 | C |
| ATOM | 2626 | CE2 | PHE | A 341 | 43.066 | 82.700 | 11.246 | 1.00 | 29.11 | C |
| ATOM | 2627 | CZ | PHE | A 341 | 42.095 | 81.887 | 11.829 | 1.00 | 30.00 | C |
| ATOM | 2628 | N | LYS | A 342 | 48.587 | 81.115 | 15.307 | 1.00 | 29.61 | N |
| ATOM | 2629 | CA | LYS | A 342 | 49.966 | 80.860 | 15.703 | 1.00 | 29.31 | C |
| ATOM | 2630 | C | LYS | A 342 | 50.434 | 79.419 | 15.613 | 1.00 | 28.97 | C |
| ATOM | 2631 | O | LYS | A 342 | 51.654 | 79.158 | 15.603 | 1.00 | 27.76 | O |
| ATOM | 2632 | CB | LYS | A 342 | 50.220 | 81.416 | 17.121 | 1.00 | 30.53 | C |
| ATOM | 2633 | CG | LYS | A 342 | 50.167 | 82.966 | 17.220 | 1.00 | 32.85 | C |
| ATOM | 2634 | CD | LYS | A 342 | 50.907 | 83.618 | 16.047 | 1.00 | 34.58 | C |
| ATOM | 2635 | CE | LYS | A 342 | 50.902 | 85.166 | 16.121 | 1.00 | 36.41 | C |
| ATOM | 2636 | NZ | LYS | A 342 | 51.414 | 85.724 | 14.805 | 1.00 | 38.01 | N |
| ATOM | 2637 | N | PHE | A 343 | 49.479 | 78.473 | 15.567 | 1.00 | 28.41 | N |
| ATOM | 2638 | CA | PHE | A 343 | 49.838 | 77.056 | 15.407 | 1.00 | 27.30 | C |
| ATOM | 2639 | C | PHE | A 343 | 49.124 | 76.565 | 14.146 | 1.00 | 26.55 | C |
| ATOM | 2640 | O | PHE | A 343 | 47.872 | 76.579 | 14.059 | 1.00 | 26.28 | O |
| ATOM | 2641 | CB | PHE | A 343 | 49.436 | 76.182 | 16.616 | 1.00 | 27.20 | C |
| ATOM | 2642 | CG | PHE | A 343 | 49.945 | 74.734 | 16.499 | 1.00 | 28.42 | C |
| ATOM | 2643 | CD1 | PHE | A 343 | 51.324 | 74.455 | 16.601 | 1.00 | 27.82 | C |
| ATOM | 2644 | CD2 | PHE | A 343 | 49.071 | 73.690 | 16.180 | 1.00 | 27.70 | C |
| ATOM | 2645 | CE1 | PHE | A 343 | 51.820 | 73.170 | 16.375 | 1.00 | 27.95 | C |
| ATOM | 2646 | CE2 | PHE | A 343 | 49.553 | 72.380 | 15.946 | 1.00 | 27.24 | C |
| ATOM | 2647 | CZ | PHE | A 343 | 50.930 | 72.119 | 16.039 | 1.00 | 27.37 | C |
| ATOM | 2648 | N | GLN | A 344 | 49.923 | 76.135 | 13.171 | 1.00 | 26.04 | N |

| ATOM | 2649 | CA | GLN | A | 344 | 49.392 | 75.687 | 11.887 | 1.00 | 25.97 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2650 | C | GLN | A | 344 | 49.950 | 74.319 | 11.528 | 1.00 | 25.86 | C |
| ATOM | 2651 | O | GLN | A | 344 | 51.119 | 74.029 | 11.779 | 1.00 | 25.72 | O |
| ATOM | 2652 | CB | GLN | A | 344 | 49.745 | 76.708 | 10.792 | 1.00 | 27.49 | C |
| ATOM | 2653 | CG | GLN | A | 344 | 49.324 | 78.156 | 11.146 | 1.00 | 28.46 | C |
| ATOM | 2654 | CD | GLN | A | 344 | 49.595 | 79.143 | 9.996 | 1.00 | 29.50 | C |
| ATOM | 2655 | OE1 | GLN | A | 344 | 49.897 | 80.335 | 10.227 | 1.00 | 30.96 | O |
| ATOM | 2656 | NE2 | GLN | A | 344 | 49.464 | 78.665 | 8.778 | 1.00 | 28.18 | N |
| ATOM | 2657 | N | PHE | A | 345 | 49.121 | 73.479 | 10.918 | 1.00 | 25.27 | N |
| ATOM | 2658 | CA | PHE | A | 345 | 49.600 | 72.159 | 10.609 | 1.00 | 25.46 | C |
| ATOM | 2659 | C | PHE | A | 345 | 48.878 | 71.515 | 9.445 | 1.00 | 25.60 | C |
| ATOM | 2660 | O | PHE | A | 345 | 47.846 | 72.031 | 8.962 | 1.00 | 27.21 | O |
| ATOM | 2661 | CB | PHE | A | 345 | 49.455 | 71.288 | 11.876 | 1.00 | 24.95 | C |
| ATOM | 2662 | CG | PHE | A | 345 | 48.086 | 71.351 | 12.503 | 1.00 | 25.26 | C |
| ATOM | 2663 | CD1 | PHE | A | 345 | 47.668 | 72.491 | 13.185 | 1.00 | 24.97 | C |
| ATOM | 2664 | CD2 | PHE | A | 345 | 47.189 | 70.274 | 12.379 | 1.00 | 26.06 | C |
| ATOM | 2665 | CE1 | PHE | A | 345 | 46.383 | 72.576 | 13.738 | 1.00 | 26.02 | C |
| ATOM | 2666 | CE2 | PHE | A | 345 | 45.879 | 70.343 | 12.935 | 1.00 | 25.44 | C |
| ATOM | 2667 | CZ | PHE | A | 345 | 45.479 | 71.504 | 13.616 | 1.00 | 26.46 | C |
| ATOM | 2668 | N | ILE | A | 346 | 49.426 | 70.401 | 8.963 | 1.00 | 24.20 | N |
| ATOM | 2669 | CA | ILE | A | 346 | 48.745 | 69.649 | 7.924 | 1.00 | 23.59 | C |
| ATOM | 2670 | C | ILE | A | 346 | 48.540 | 68.281 | 8.588 | 1.00 | 23.77 | C |
| ATOM | 2671 | O | ILE | A | 346 | 49.486 | 67.509 | 8.753 | 1.00 | 22.12 | O |
| ATOM | 2672 | CB | ILE | A | 346 | 49.595 | 69.481 | 6.642 | 1.00 | 23.72 | C |
| ATOM | 2673 | CG1 | ILE | A | 346 | 49.953 | 70.853 | 6.040 | 1.00 | 23.45 | C |
| ATOM | 2674 | CG2 | ILE | A | 346 | 48.788 | 68.700 | 5.646 | 1.00 | 23.17 | C |
| ATOM | 2675 | CD1 | ILE | A | 346 | 50.792 | 70.770 | 4.755 | 1.00 | 21.85 | C |
| ATOM | 2676 | N | THR | A | 347 | 47.305 | 67.997 | 8.984 | 1.00 | 23.24 | N |
| ATOM | 2677 | CA | THR | A | 347 | 47.020 | 66.751 | 9.669 | 1.00 | 23.46 | C |
| ATOM | 2678 | C | THR | A | 347 | 47.531 | 65.471 | 9.032 | 1.00 | 23.73 | C |
| ATOM | 2679 | O | THR | A | 347 | 48.173 | 64.679 | 9.708 | 1.00 | 23.30 | O |
| ATOM | 2680 | CB | THR | A | 347 | 45.515 | 66.558 | 9.860 | 1.00 | 23.47 | C |
| ATOM | 2681 | OG1 | THR | A | 347 | 44.872 | 66.719 | 8.585 | 1.00 | 25.02 | O |
| ATOM | 2682 | CG2 | THR | A | 347 | 44.959 | 67.578 | 10.878 | 1.00 | 24.08 | C |
| ATOM | 2683 | N | LEU | A | 348 | 47.242 | 65.263 | 7.744 | 1.00 | 23.46 | N |
| ATOM | 2684 | CA | LEU | A | 348 | 47.614 | 63.996 | 7.105 | 1.00 | 23.86 | C |
| ATOM | 2685 | C | LEU | A | 348 | 48.882 | 63.954 | 6.264 | 1.00 | 23.71 | C |
| ATOM | 2686 | O | LEU | A | 348 | 49.034 | 63.108 | 5.384 | 1.00 | 23.70 | O |
| ATOM | 2687 | CB | LEU | A | 348 | 46.418 | 63.495 | 6.282 | 1.00 | 24.22 | C |
| ATOM | 2688 | CG | LEU | A | 348 | 45.061 | 63.626 | 7.003 | 1.00 | 25.29 | C |
| ATOM | 2689 | CD1 | LEU | A | 348 | 43.930 | 62.969 | 6.130 | 1.00 | 25.70 | C |
| ATOM | 2690 | CD2 | LEU | A | 348 | 45.087 | 62.963 | 8.365 | 1.00 | 24.34 | C |
| ATOM | 2691 | N | ALA | A | 349 | 49.798 | 64.867 | 6.534 | 1.00 | 23.22 | N |
| ATOM | 2692 | CA | ALA | A | 349 | 51.052 | 64.909 | 5.801 | 1.00 | 23.24 | C |
| ATOM | 2693 | C | ALA | A | 349 | 51.767 | 63.547 | 5.772 | 1.00 | 23.35 | C |
| ATOM | 2694 | O | ALA | A | 349 | 52.248 | 63.117 | 4.726 | 1.00 | 23.03 | O |
| ATOM | 2695 | CB | ALA | A | 349 | 51.970 | 65.948 | 6.441 | 1.00 | 23.40 | C |
| ATOM | 2696 | N | GLY | A | 350 | 51.852 | 62.895 | 6.937 | 1.00 | 23.56 | N |
| ATOM | 2697 | CA | GLY | A | 350 | 52.521 | 61.605 | 7.030 | 1.00 | 23.01 | C |
| ATOM | 2698 | C | GLY | A | 350 | 51.820 | 60.513 | 6.241 | 1.00 | 22.97 | C |
| ATOM | 2699 | O | GLY | A | 350 | 52.461 | 59.729 | 5.534 | 1.00 | 22.66 | O |
| ATOM | 2700 | N | PHE | A | 351 | 50.501 | 60.445 | 6.359 | 1.00 | 22.65 | N |
| ATOM | 2701 | CA | PHE | A | 351 | 49.747 | 59.436 | 5.620 | 1.00 | 23.39 | C |
| ATOM | 2702 | C | PHE | A | 351 | 50.046 | 59.578 | 4.106 | 1.00 | 23.30 | C |
| ATOM | 2703 | O | PHE | A | 351 | 50.287 | 58.595 | 3.402 | 1.00 | 23.57 | O |
| ATOM | 2704 | CB | PHE | A | 351 | 48.243 | 59.631 | 5.878 | 1.00 | 22.51 | C |
| ATOM | 2705 | CG | PHE | A | 351 | 47.354 | 58.858 | 4.955 | 1.00 | 22.05 | C |
| ATOM | 2706 | CD1 | PHE | A | 351 | 47.068 | 57.509 | 5.199 | 1.00 | 22.95 | C |
| ATOM | 2707 | CD2 | PHE | A | 351 | 46.779 | 59.490 | 3.842 | 1.00 | 23.10 | C |
| ATOM | 2708 | CE1 | PHE | A | 351 | 46.192 | 56.782 | 4.343 | 1.00 | 23.70 | C |
| ATOM | 2709 | CE2 | PHE | A | 351 | 45.902 | 58.786 | 2.961 | 1.00 | 23.51 | C |
| ATOM | 2710 | CZ | PHE | A | 351 | 45.610 | 57.428 | 3.228 | 1.00 | 23.62 | C |
| ATOM | 2711 | N | HIS | A | 352 | 50.015 | 60.801 | 3.613 | 1.00 | 22.62 | N |
| ATOM | 2712 | CA | HIS | A | 352 | 50.250 | 61.011 | 2.187 | 1.00 | 23.07 | C |
| ATOM | 2713 | C | HIS | A | 352 | 51.708 | 60.742 | 1.789 | 1.00 | 22.43 | C |
| ATOM | 2714 | O | HIS | A | 352 | 51.970 | 60.058 | 0.792 | 1.00 | 22.52 | O |
| ATOM | 2715 | CB | HIS | A | 352 | 49.788 | 62.427 | 1.814 | 1.00 | 23.40 | C |
| ATOM | 2716 | CG | HIS | A | 352 | 48.298 | 62.543 | 1.712 | 1.00 | 24.03 | C |
| ATOM | 2717 | ND1 | HIS | A | 352 | 47.586 | 62.011 | 0.657 | 1.00 | 24.06 | N |
| ATOM | 2718 | CD2 | HIS | A | 352 | 47.378 | 63.102 | 2.541 | 1.00 | 24.32 | C |
| ATOM | 2719 | CE1 | HIS | A | 352 | 46.293 | 62.237 | 0.838 | 1.00 | 24.84 | C |
| ATOM | 2720 | NE2 | HIS | A | 352 | 46.138 | 62.897 | 1.978 | 1.00 | 24.77 | N |
| ATOM | 2721 | N | ALA | A | 353 | 52.659 | 61.242 | 2.561 | 1.00 | 21.25 | N |
| ATOM | 2722 | CA | ALA | A | 353 | 54.050 | 60.977 | 2.209 | 1.00 | 21.68 | C |
| ATOM | 2723 | C | ALA | A | 353 | 54.329 | 59.463 | 2.210 | 1.00 | 22.50 | C |
| ATOM | 2724 | O | ALA | A | 353 | 54.951 | 58.945 | 1.287 | 1.00 | 22.54 | O |
| ATOM | 2725 | CB | ALA | A | 353 | 54.973 | 61.656 | 3.187 | 1.00 | 21.57 | C |
| ATOM | 2726 | N | LEU | A | 354 | 53.904 | 58.775 | 3.275 | 1.00 | 21.44 | N |
| ATOM | 2727 | CA | LEU | A | 354 | 54.109 | 57.324 | 3.379 | 1.00 | 22.10 | C |
| ATOM | 2728 | C | LEU | A | 354 | 53.411 | 56.533 | 2.273 | 1.00 | 22.12 | C |

| ATOM | 2729 | O | LEU A 354 | 54.008 | 55.665 | 1.646 | 1.00 | 22.38 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2730 | CB | LEU A 354 | 53.588 | 56.789 | 4.727 | 1.00 | 20.96 | C |
| ATOM | 2731 | CG | LEU A 354 | 53.791 | 55.282 | 5.000 | 1.00 | 21.14 | C |
| ATOM | 2732 | CD1 | LEU A 354 | 53.869 | 55.079 | 6.521 | 1.00 | 19.90 | C |
| ATOM | 2733 | CD2 | LEU A 354 | 52.637 | 54.401 | 4.392 | 1.00 | 20.58 | C |
| ATOM | 2734 | N | ASN A 355 | 52.133 | 56.806 | 2.059 | 1.00 | 21.71 | N |
| ATOM | 2735 | CA | ASN A 355 | 51.417 | 56.052 | 1.036 | 1.00 | 22.75 | C |
| ATOM | 2736 | C | ASN A 355 | 51.955 | 56.330 | -0.386 | 1.00 | 22.91 | C |
| ATOM | 2737 | O | ASN A 355 | 52.149 | 55.393 | -1.195 | 1.00 | 21.83 | O |
| ATOM | 2738 | CB | ASN A 355 | 49.902 | 56.354 | 1.124 | 1.00 | 22.32 | C |
| ATOM | 2739 | CG | ASN A 355 | 49.215 | 55.515 | 2.203 | 1.00 | 22.43 | C |
| ATOM | 2740 | OD1 | ASN A 355 | 48.776 | 54.387 | 1.942 | 1.00 | 23.53 | O |
| ATOM | 2741 | ND2 | ASN A 355 | 49.175 | 56.027 | 3.422 | 1.00 | 22.37 | N |
| ATOM | 2742 | N | TYR A 356 | 52.181 | 57.608 | -0.682 | 1.00 | 23.14 | N |
| ATOM | 2743 | CA | TYR A 356 | 52.662 | 57.964 | -2.017 | 1.00 | 24.65 | C |
| ATOM | 2744 | C | TYR A 356 | 54.064 | 57.422 | -2.272 | 1.00 | 23.82 | C |
| ATOM | 2745 | O | TYR A 356 | 54.312 | 56.770 | -3.266 | 1.00 | 24.32 | O |
| ATOM | 2746 | CB | TYR A 356 | 52.689 | 59.497 | -2.224 | 1.00 | 25.31 | C |
| ATOM | 2747 | CG | TYR A 356 | 53.304 | 59.828 | -3.575 | 1.00 | 26.88 | C |
| ATOM | 2748 | CD1 | TYR A 356 | 52.626 | 59.517 | -4.763 | 1.00 | 26.52 | C |
| ATOM | 2749 | CD2 | TYR A 356 | 54.616 | 60.299 | -3.664 | 1.00 | 27.26 | C |
| ATOM | 2750 | CE1 | TYR A 356 | 53.233 | 59.652 | -6.008 | 1.00 | 26.77 | C |
| ATOM | 2751 | CE2 | TYR A 356 | 55.235 | 60.438 | -4.909 | 1.00 | 28.42 | C |
| ATOM | 2752 | CZ | TYR A 356 | 54.526 | 60.110 | -6.072 | 1.00 | 27.44 | C |
| ATOM | 2753 | OH | TYR A 356 | 55.112 | 60.271 | -7.301 | 1.00 | 28.16 | O |
| ATOM | 2754 | N | SER A 357 | 54.986 | 57.689 | -1.368 | 1.00 | 23.69 | N |
| ATOM | 2755 | CA | SER A 357 | 56.340 | 57.215 | -1.629 | 1.00 | 24.16 | C |
| ATOM | 2756 | C | SER A 357 | 56.387 | 55.677 | -1.778 | 1.00 | 23.99 | C |
| ATOM | 2757 | O | SER A 357 | 57.143 | 55.159 | -2.611 | 1.00 | 23.97 | O |
| ATOM | 2758 | CB | SER A 357 | 57.297 | 57.702 | -0.525 | 1.00 | 23.38 | C |
| ATOM | 2759 | OG | SER A 357 | 56.967 | 57.119 | 0.740 | 1.00 | 24.20 | O |
| ATOM | 2760 | N | MET A 358 | 55.590 | 54.921 | -1.008 | 1.00 | 24.06 | N |
| ATOM | 2761 | CA | MET A 358 | 55.686 | 53.477 | -1.201 | 1.00 | 23.62 | C |
| ATOM | 2762 | C | MET A 358 | 54.978 | 53.060 | -2.497 | 1.00 | 24.09 | C |
| ATOM | 2763 | O | MET A 358 | 55.441 | 52.168 | -3.204 | 1.00 | 24.13 | O |
| ATOM | 2764 | CB | MET A 358 | 55.158 | 52.693 | 0.026 | 1.00 | 23.16 | C |
| ATOM | 2765 | CG | MET A 358 | 55.323 | 51.144 | -0.106 | 1.00 | 21.95 | C |
| ATOM | 2766 | SD | MET A 358 | 57.035 | 50.618 | -0.531 | 1.00 | 23.81 | S |
| ATOM | 2767 | CE | MET A 358 | 57.888 | 51.083 | 1.034 | 1.00 | 22.31 | C |
| ATOM | 2768 | N | PHE A 359 | 53.865 | 53.688 | -2.838 | 1.00 | 24.16 | N |
| ATOM | 2769 | CA | PHE A 359 | 53.236 | 53.296 | -4.103 | 1.00 | 25.19 | C |
| ATOM | 2770 | C | PHE A 359 | 54.199 | 53.530 | -5.289 | 1.00 | 25.30 | C |
| ATOM | 2771 | O | PHE A 359 | 54.367 | 52.674 | -6.153 | 1.00 | 24.83 | O |
| ATOM | 2772 | CB | PHE A 359 | 51.962 | 54.085 | -4.382 | 1.00 | 24.97 | C |
| ATOM | 2773 | CG | PHE A 359 | 51.342 | 53.753 | -5.712 | 1.00 | 26.20 | C |
| ATOM | 2774 | CD1 | PHE A 359 | 50.531 | 52.628 | -5.841 | 1.00 | 26.36 | C |
| ATOM | 2775 | CD2 | PHE A 359 | 51.657 | 54.502 | -6.861 | 1.00 | 26.50 | C |
| ATOM | 2776 | CE1 | PHE A 359 | 50.038 | 52.227 | -7.073 | 1.00 | 27.15 | C |
| ATOM | 2777 | CE2 | PHE A 359 | 51.175 | 54.113 | -8.117 | 1.00 | 26.90 | C |
| ATOM | 2778 | CZ | PHE A 359 | 50.355 | 52.961 | -8.230 | 1.00 | 26.55 | C |
| ATOM | 2779 | N | ASP A 360 | 54.812 | 54.707 | -5.313 | 1.00 | 25.85 | N |
| ATOM | 2780 | CA | ASP A 360 | 55.727 | 55.076 | -6.398 | 1.00 | 26.60 | C |
| ATOM | 2781 | C | ASP A 360 | 56.910 | 54.107 | -6.499 | 1.00 | 26.51 | C |
| ATOM | 2782 | O | ASP A 360 | 57.222 | 53.609 | -7.578 | 1.00 | 25.85 | O |
| ATOM | 2783 | CB | ASP A 360 | 56.227 | 56.500 | -6.188 | 1.00 | 26.33 | C |
| ATOM | 2784 | CG | ASP A 360 | 56.984 | 57.030 | -7.394 | 1.00 | 27.72 | C |
| ATOM | 2785 | OD1 | ASP A 360 | 56.398 | 57.061 | -8.505 | 1.00 | 27.04 | O |
| ATOM | 2786 | OD2 | ASP A 360 | 58.155 | 57.411 | -7.212 | 1.00 | 27.00 | O |
| ATOM | 2787 | N | LEU A 361 | 57.545 | 53.819 | -5.367 | 1.00 | 25.54 | N |
| ATOM | 2788 | CA | LEU A 361 | 58.682 | 52.901 | -5.366 | 1.00 | 25.84 | C |
| ATOM | 2789 | C | LEU A 361 | 58.223 | 51.495 | -5.765 | 1.00 | 25.56 | C |
| ATOM | 2790 | O | LEU A 361 | 58.808 | 50.875 | -6.645 | 1.00 | 26.44 | O |
| ATOM | 2791 | CB | LEU A 361 | 59.326 | 52.860 | -3.962 | 1.00 | 25.47 | C |
| ATOM | 2792 | CG | LEU A 361 | 60.427 | 51.809 | -3.731 | 1.00 | 25.76 | C |
| ATOM | 2793 | CD1 | LEU A 361 | 61.669 | 52.204 | -4.554 | 1.00 | 26.30 | C |
| ATOM | 2794 | CD2 | LEU A 361 | 60.797 | 51.752 | -2.243 | 1.00 | 24.60 | C |
| ATOM | 2795 | N | ALA A 362 | 57.162 | 50.990 | -5.135 | 1.00 | 25.30 | N |
| ATOM | 2796 | CA | ALA A 362 | 56.678 | 49.637 | -5.453 | 1.00 | 25.75 | C |
| ATOM | 2797 | C | ALA A 362 | 56.249 | 49.504 | -6.943 | 1.00 | 26.34 | C |
| ATOM | 2798 | O | ALA A 362 | 56.510 | 48.485 | -7.601 | 1.00 | 26.18 | O |
| ATOM | 2799 | CB | ALA A 362 | 55.511 | 49.258 | -4.532 | 1.00 | 24.44 | C |
| ATOM | 2800 | N | TYR A 363 | 55.599 | 50.524 | -7.473 | 1.00 | 26.72 | N |
| ATOM | 2801 | CA | TYR A 363 | 55.149 | 50.457 | -8.867 | 1.00 | 27.80 | C |
| ATOM | 2802 | C | TYR A 363 | 56.359 | 50.347 | -9.816 | 1.00 | 27.31 | C |
| ATOM | 2803 | O | TYR A 363 | 56.397 | 49.473 | -10.704 | 1.00 | 26.85 | O |
| ATOM | 2804 | CB | TYR A 363 | 54.304 | 51.692 | -9.199 | 1.00 | 28.55 | C |
| ATOM | 2805 | CG | TYR A 363 | 53.727 | 51.635 | -10.600 | 1.00 | 30.87 | C |
| ATOM | 2806 | CD1 | TYR A 363 | 54.449 | 52.122 | -11.688 | 1.00 | 31.06 | C |
| ATOM | 2807 | CD2 | TYR A 363 | 52.474 | 51.062 | -10.837 | 1.00 | 31.55 | C |
| ATOM | 2808 | CE1 | TYR A 363 | 53.937 | 52.041 | -12.986 | 1.00 | 32.81 | C |

| ATOM | 2809 | CE2 | TYR | A | 363 | 51.961 | 50.974 | -12.121 | 1.00 | 32.81 | C |
|------|------|-----|-----|---|-----|--------|--------|---------|------|-------|---|
| ATOM | 2810 | CZ  | TYR | A | 363 | 52.704 | 51.468 | -13.185 | 1.00 | 33.59 | C |
| ATOM | 2811 | OH  | TYR | A | 363 | 52.212 | 51.380 | -14.463 | 1.00 | 35.99 | O |
| ATOM | 2812 | N   | GLY | A | 364 | 57.355 | 51.203 | -9.594  | 1.00 | 26.76 | N |
| ATOM | 2813 | CA  | GLY | A | 364 | 58.572 | 51.160 | -10.402 | 1.00 | 26.18 | C |
| ATOM | 2814 | C   | GLY | A | 364 | 59.236 | 49.799 | -10.203 | 1.00 | 26.60 | C |
| ATOM | 2815 | O   | GLY | A | 364 | 59.679 | 49.162 | -11.168 | 1.00 | 26.48 | O |
| ATOM | 2816 | N   | TYR | A | 365 | 59.293 | 49.330 | -8.958  | 1.00 | 25.79 | N |
| ATOM | 2817 | CA  | TYR | A | 365 | 59.929 | 48.040 | -8.648  | 1.00 | 26.05 | C |
| ATOM | 2818 | C   | TYR | A | 365 | 59.230 | 46.864 | -9.349  | 1.00 | 26.19 | C |
| ATOM | 2819 | O   | TYR | A | 365 | 59.883 | 45.972 | -9.865  | 1.00 | 26.22 | O |
| ATOM | 2820 | CB  | TYR | A | 365 | 59.916 | 47.819 | -7.125  | 1.00 | 25.75 | C |
| ATOM | 2821 | CG  | TYR | A | 365 | 60.701 | 46.626 | -6.626  | 1.00 | 25.42 | C |
| ATOM | 2822 | CD1 | TYR | A | 365 | 62.100 | 46.604 | -6.675  | 1.00 | 24.59 | C |
| ATOM | 2823 | CD2 | TYR | A | 365 | 60.042 | 45.556 | -6.005  | 1.00 | 24.96 | C |
| ATOM | 2824 | CE1 | TYR | A | 365 | 62.827 | 45.540 | -6.093  | 1.00 | 25.14 | C |
| ATOM | 2825 | CE2 | TYR | A | 365 | 60.757 | 44.506 | -5.434  | 1.00 | 25.15 | C |
| ATOM | 2826 | CZ  | TYR | A | 365 | 62.143 | 44.507 | -5.473  | 1.00 | 24.52 | C |
| ATOM | 2827 | OH  | TYR | A | 365 | 62.817 | 43.501 | -4.821  | 1.00 | 24.86 | O |
| ATOM | 2828 | N   | ALA | A | 366 | 57.901 | 46.838 | -9.325  | 1.00 | 27.29 | N |
| ATOM | 2829 | CA  | ALA | A | 366 | 57.151 | 45.775 | -10.006 | 1.00 | 28.70 | C |
| ATOM | 2830 | C   | ALA | A | 366 | 57.493 | 45.753 | -11.498 | 1.00 | 30.42 | C |
| ATOM | 2831 | O   | ALA | A | 366 | 57.526 | 44.690 | -12.114 | 1.00 | 30.88 | O |
| ATOM | 2832 | CB  | ALA | A | 366 | 55.651 | 45.994 | -9.860  | 1.00 | 27.44 | C |
| ATOM | 2833 | N   | GLN | A | 367 | 57.726 | 46.932 | -12.059 | 1.00 | 31.52 | N |
| ATOM | 2834 | CA  | GLN | A | 367 | 58.028 | 47.074 | -13.474 | 1.00 | 33.68 | C |
| ATOM | 2835 | C   | GLN | A | 367 | 59.485 | 46.841 | -13.841 | 1.00 | 33.84 | C |
| ATOM | 2836 | O   | GLN | A | 367 | 59.769 | 46.051 | -14.733 | 1.00 | 33.25 | O |
| ATOM | 2837 | CB  | GLN | A | 367 | 57.685 | 48.481 | -13.982 | 1.00 | 35.74 | C |
| ATOM | 2838 | CG  | GLN | A | 367 | 56.268 | 48.971 | -13.697 | 1.00 | 39.65 | C |
| ATOM | 2839 | CD  | GLN | A | 367 | 55.235 | 48.040 | -14.262 | 1.00 | 41.78 | C |
| ATOM | 2840 | OE1 | GLN | A | 367 | 55.201 | 47.796 | -15.467 | 1.00 | 43.70 | O |
| ATOM | 2841 | NE2 | GLN | A | 367 | 54.394 | 47.491 | -13.392 | 1.00 | 43.70 | N |
| ATOM | 2842 | N   | ASN | A | 368 | 60.385 | 47.528 | -13.136 | 1.00 | 33.23 | N |
| ATOM | 2843 | CA  | ASN | A | 368 | 61.814 | 47.507 | -13.445 | 1.00 | 33.24 | C |
| ATOM | 2844 | C   | ASN | A | 368 | 62.780 | 47.133 | -12.329 | 1.00 | 32.11 | C |
| ATOM | 2845 | O   | ASN | A | 368 | 63.953 | 47.463 | -12.391 | 1.00 | 31.05 | O |
| ATOM | 2846 | CB  | ASN | A | 368 | 62.199 | 48.880 | -13.975 | 1.00 | 34.39 | C |
| ATOM | 2847 | CG  | ASN | A | 368 | 61.343 | 49.295 | -15.152 | 1.00 | 36.55 | C |
| ATOM | 2848 | OD1 | ASN | A | 368 | 60.646 | 50.321 | -15.100 | 1.00 | 37.81 | O |
| ATOM | 2849 | ND2 | ASN | A | 368 | 61.388 | 48.501 | -16.225 | 1.00 | 36.50 | N |
| ATOM | 2850 | N   | GLN | A | 369 | 62.278 | 46.465 | -11.304 | 1.00 | 31.07 | N |
| ATOM | 2851 | CA  | GLN | A | 369 | 63.124 | 46.054 | -10.194 | 1.00 | 30.20 | C |
| ATOM | 2852 | C   | GLN | A | 369 | 64.149 | 47.055 | -9.650  | 1.00 | 29.07 | C |
| ATOM | 2853 | O   | GLN | A | 369 | 63.797 | 48.177 | -9.269  | 1.00 | 27.95 | O |
| ATOM | 2854 | CB  | GLN | A | 369 | 63.802 | 44.721 | -10.534 | 1.00 | 31.00 | C |
| ATOM | 2855 | CG  | GLN | A | 369 | 62.795 | 43.602 | -10.801 | 1.00 | 31.17 | C |
| ATOM | 2856 | CD  | GLN | A | 369 | 62.422 | 43.518 | -12.264 | 1.00 | 33.13 | C |
| ATOM | 2857 | OE1 | GLN | A | 369 | 63.310 | 43.435 | -13.119 | 1.00 | 33.17 | O |
| ATOM | 2858 | NE2 | GLN | A | 369 | 61.107 | 43.530 | -12.571 | 1.00 | 31.93 | N |
| ATOM | 2859 | N   | MET | A | 370 | 65.424 | 46.682 | -9.612  | 1.00 | 28.40 | N |
| ATOM | 2860 | CA  | MET | A | 370 | 66.391 | 47.588 | -9.001  | 1.00 | 27.71 | C |
| ATOM | 2861 | C   | MET | A | 370 | 66.487 | 49.017 | -9.546  | 1.00 | 27.91 | C |
| ATOM | 2862 | O   | MET | A | 370 | 66.886 | 49.921 | -8.813  | 1.00 | 27.61 | O |
| ATOM | 2863 | CB  | MET | A | 370 | 67.777 | 46.942 | -8.966  | 1.00 | 27.86 | C |
| ATOM | 2864 | CG  | MET | A | 370 | 67.897 | 45.708 | -8.072  | 1.00 | 27.44 | C |
| ATOM | 2865 | SD  | MET | A | 370 | 67.197 | 45.897 | -6.392  | 1.00 | 27.87 | S |
| ATOM | 2866 | CE  | MET | A | 370 | 68.245 | 47.241 | -5.710  | 1.00 | 26.82 | C |
| ATOM | 2867 | N   | SER | A | 371 | 66.106 | 49.230 | -10.808 | 1.00 | 27.87 | N |
| ATOM | 2868 | CA  | SER | A | 371 | 66.155 | 50.551 | -11.414 | 1.00 | 28.79 | C |
| ATOM | 2869 | C   | SER | A | 371 | 65.310 | 51.543 | -10.633 | 1.00 | 28.87 | C |
| ATOM | 2870 | O   | SER | A | 371 | 65.693 | 52.707 | -10.477 | 1.00 | 28.97 | O |
| ATOM | 2871 | CB  | SER | A | 371 | 65.647 | 50.507 | -12.869 | 1.00 | 29.51 | C |
| ATOM | 2872 | OG  | SER | A | 371 | 66.435 | 49.643 | -13.656 | 1.00 | 31.13 | O |
| ATOM | 2873 | N   | ALA | A | 372 | 64.161 | 51.075 | -10.143 | 1.00 | 27.61 | N |
| ATOM | 2874 | CA  | ALA | A | 372 | 63.250 | 51.910 | -9.384  | 1.00 | 27.60 | C |
| ATOM | 2875 | C   | ALA | A | 372 | 63.858 | 52.303 | -8.036  | 1.00 | 28.01 | C |
| ATOM | 2876 | O   | ALA | A | 372 | 63.762 | 53.466 | -7.613  | 1.00 | 28.63 | O |
| ATOM | 2877 | CB  | ALA | A | 372 | 61.924 | 51.156 | -9.177  | 1.00 | 27.10 | C |
| ATOM | 2878 | N   | TYR | A | 373 | 64.481 | 51.343 | -7.355  | 1.00 | 27.81 | N |
| ATOM | 2879 | CA  | TYR | A | 373 | 65.100 | 51.639 | -6.067  | 1.00 | 28.49 | C |
| ATOM | 2880 | C   | TYR | A | 373 | 66.241 | 52.644 | -6.215  | 1.00 | 28.88 | C |
| ATOM | 2881 | O   | TYR | A | 373 | 66.419 | 53.535 | -5.378  | 1.00 | 28.30 | O |
| ATOM | 2882 | CB  | TYR | A | 373 | 65.660 | 50.372 | -5.405  | 1.00 | 28.44 | C |
| ATOM | 2883 | CG  | TYR | A | 373 | 66.269 | 50.659 | -4.058  | 1.00 | 28.34 | C |
| ATOM | 2884 | CD1 | TYR | A | 373 | 65.467 | 51.024 | -2.979  | 1.00 | 28.19 | C |
| ATOM | 2885 | CD2 | TYR | A | 373 | 67.670 | 50.632 | -3.876  | 1.00 | 28.68 | C |
| ATOM | 2886 | CE1 | TYR | A | 373 | 66.022 | 51.364 | -1.759  | 1.00 | 28.25 | C |
| ATOM | 2887 | CE2 | TYR | A | 373 | 68.247 | 50.961 | -2.653  | 1.00 | 28.02 | C |
| ATOM | 2888 | CZ  | TYR | A | 373 | 67.410 | 51.329 | -1.597  | 1.00 | 29.09 | C |

| ATOM | 2889 | OH | TYR A 373 | 67.937 | 51.662 | -0.378 | 1.00 | 28.12 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2890 | N | VAL A 374 | 67.038 | 52.478 | -7.270 | 1.00 | 29.57 | N |
| ATOM | 2891 | CA | VAL A 374 | 68.167 | 53.376 | -7.513 | 1.00 | 29.77 | C |
| ATOM | 2892 | C | VAL A 374 | 67.664 | 54.808 | -7.641 | 1.00 | 30.22 | C |
| ATOM | 2893 | O | VAL A 374 | 68.318 | 55.732 | -7.173 | 1.00 | 30.32 | O |
| ATOM | 2894 | CB | VAL A 374 | 68.957 | 52.895 | -8.774 | 1.00 | 31.08 | C |
| ATOM | 2895 | CG1 | VAL A 374 | 69.961 | 53.965 | -9.246 | 1.00 | 31.95 | C |
| ATOM | 2896 | CG2 | VAL A 374 | 69.685 | 51.590 | -8.419 | 1.00 | 30.49 | C |
| ATOM | 2897 | N | GLU A 375 | 66.484 | 55.006 | -8.238 | 1.00 | 30.58 | N |
| ATOM | 2898 | CA | GLU A 375 | 65.938 | 56.355 | -8.356 | 1.00 | 31.63 | C |
| ATOM | 2899 | C | GLU A 375 | 65.702 | 56.997 | -6.986 | 1.00 | 30.64 | C |
| ATOM | 2900 | O | GLU A 375 | 65.962 | 58.183 | -6.788 | 1.00 | 29.94 | O |
| ATOM | 2901 | CB | GLU A 375 | 64.629 | 56.353 | -9.157 | 1.00 | 34.44 | C |
| ATOM | 2902 | CG | GLU A 375 | 64.873 | 56.452 | -10.655 | 1.00 | 39.53 | C |
| ATOM | 2903 | CD | GLU A 375 | 63.603 | 56.354 | -11.498 | 1.00 | 42.96 | C |
| ATOM | 2904 | OE1 | GLU A 375 | 62.583 | 57.001 | -11.131 | 1.00 | 44.78 | O |
| ATOM | 2905 | OE2 | GLU A 375 | 63.629 | 55.638 | -12.546 | 1.00 | 45.34 | O |
| ATOM | 2906 | N | LEU A 376 | 65.197 | 56.222 | -6.035 | 1.00 | 29.15 | N |
| ATOM | 2907 | CA | LEU A 376 | 64.967 | 56.754 | -4.700 | 1.00 | 28.21 | C |
| ATOM | 2908 | C | LEU A 376 | 66.325 | 56.976 | -4.014 | 1.00 | 28.10 | C |
| ATOM | 2909 | O | LEU A 376 | 66.538 | 57.978 | -3.345 | 1.00 | 27.89 | O |
| ATOM | 2910 | CB | LEU A 376 | 64.134 | 55.765 | -3.868 | 1.00 | 27.52 | C |
| ATOM | 2911 | CG | LEU A 376 | 64.112 | 56.008 | -2.348 | 1.00 | 26.99 | C |
| ATOM | 2912 | CD1 | LEU A 376 | 63.563 | 57.393 | -2.028 | 1.00 | 27.55 | C |
| ATOM | 2913 | CD2 | LEU A 376 | 63.238 | 54.911 | -1.705 | 1.00 | 25.94 | C |
| ATOM | 2914 | N | GLN A 377 | 67.240 | 56.030 | -4.171 | 1.00 | 27.91 | N |
| ATOM | 2915 | CA | GLN A 377 | 68.540 | 56.174 | -3.528 | 1.00 | 28.76 | C |
| ATOM | 2916 | C | GLN A 377 | 69.260 | 57.454 | -4.004 | 1.00 | 28.84 | C |
| ATOM | 2917 | O | GLN A 377 | 69.875 | 58.162 | -3.209 | 1.00 | 28.53 | O |
| ATOM | 2918 | CB | GLN A 377 | 69.400 | 54.937 | -3.804 | 1.00 | 29.18 | C |
| ATOM | 2919 | CG | GLN A 377 | 70.697 | 54.988 | -3.070 | 1.00 | 31.14 | C |
| ATOM | 2920 | CD | GLN A 377 | 71.491 | 53.707 | -3.194 | 1.00 | 32.86 | C |
| ATOM | 2921 | OE1 | GLN A 377 | 71.782 | 53.022 | -2.176 | 1.00 | 33.83 | O |
| ATOM | 2922 | NE2 | GLN A 377 | 71.847 | 53.356 | -4.425 | 1.00 | 31.45 | N |
| ATOM | 2923 | N | GLU A 378 | 69.170 | 57.747 | -5.300 | 1.00 | 29.44 | N |
| ATOM | 2924 | CA | GLU A 378 | 69.808 | 58.946 | -5.836 | 1.00 | 30.75 | C |
| ATOM | 2925 | C | GLU A 378 | 69.187 | 60.182 | -5.209 | 1.00 | 30.87 | C |
| ATOM | 2926 | O | GLU A 378 | 69.892 | 61.151 | -4.915 | 1.00 | 30.91 | O |
| ATOM | 2927 | CB | GLU A 378 | 69.695 | 58.988 | -7.372 | 1.00 | 31.47 | C |
| ATOM | 2928 | CG | GLU A 378 | 70.584 | 57.967 | -8.055 | 1.00 | 33.84 | C |
| ATOM | 2929 | CD | GLU A 378 | 72.082 | 58.193 | -7.719 | 1.00 | 36.39 | C |
| ATOM | 2930 | OE1 | GLU A 378 | 72.582 | 59.331 | -7.969 | 1.00 | 38.04 | O |
| ATOM | 2931 | OE2 | GLU A 378 | 72.747 | 57.258 | -7.199 | 1.00 | 36.20 | O |
| ATOM | 2932 | N | ARG A 379 | 67.870 | 60.183 | -4.998 | 1.00 | 30.83 | N |
| ATOM | 2933 | CA | ARG A 379 | 67.261 | 61.359 | -4.363 | 1.00 | 31.25 | C |
| ATOM | 2934 | C | ARG A 379 | 67.772 | 61.511 | -2.938 | 1.00 | 30.60 | C |
| ATOM | 2935 | O | ARG A 379 | 67.959 | 62.627 | -2.458 | 1.00 | 30.53 | O |
| ATOM | 2936 | CB | ARG A 379 | 65.742 | 61.257 | -4.333 | 1.00 | 32.56 | C |
| ATOM | 2937 | CG | ARG A 379 | 65.097 | 61.358 | -5.694 | 1.00 | 35.39 | C |
| ATOM | 2938 | CD | ARG A 379 | 63.593 | 61.300 | -5.537 | 1.00 | 39.28 | C |
| ATOM | 2939 | NE | ARG A 379 | 63.021 | 60.583 | -6.667 | 1.00 | 42.85 | N |
| ATOM | 2940 | CZ | ARG A 379 | 62.259 | 59.497 | -6.563 | 1.00 | 43.70 | C |
| ATOM | 2941 | NH1 | ARG A 379 | 61.946 | 58.969 | -5.355 | 1.00 | 42.64 | N |
| ATOM | 2942 | NH2 | ARG A 379 | 61.815 | 58.934 | -7.684 | 1.00 | 45.23 | N |
| ATOM | 2943 | N | GLU A 380 | 67.989 | 60.388 | -2.257 | 1.00 | 30.05 | N |
| ATOM | 2944 | CA | GLU A 380 | 68.490 | 60.429 | -0.882 | 1.00 | 29.26 | C |
| ATOM | 2945 | C | GLU A 380 | 69.922 | 60.955 | -0.869 | 1.00 | 29.27 | C |
| ATOM | 2946 | O | GLU A 380 | 70.294 | 61.752 | -0.012 | 1.00 | 29.39 | O |
| ATOM | 2947 | CB | GLU A 380 | 68.444 | 59.028 | -0.237 | 1.00 | 28.58 | C |
| ATOM | 2948 | CG | GLU A 380 | 67.034 | 58.589 | 0.175 | 1.00 | 28.36 | C |
| ATOM | 2949 | CD | GLU A 380 | 67.030 | 57.203 | 0.829 | 1.00 | 29.01 | C |
| ATOM | 2950 | OE1 | GLU A 380 | 67.074 | 56.195 | 0.074 | 1.00 | 28.84 | O |
| ATOM | 2951 | OE2 | GLU A 380 | 66.990 | 57.135 | 2.088 | 1.00 | 27.48 | O |
| ATOM | 2952 | N | PHE A 381 | 70.738 | 60.507 | -1.808 | 1.00 | 29.56 | N |
| ATOM | 2953 | CA | PHE A 381 | 72.112 | 61.005 | -1.846 | 1.00 | 30.34 | C |
| ATOM | 2954 | C | PHE A 381 | 72.073 | 62.518 | -2.061 | 1.00 | 30.13 | C |
| ATOM | 2955 | O | PHE A 381 | 72.812 | 63.250 | -1.419 | 1.00 | 29.30 | O |
| ATOM | 2956 | CB | PHE A 381 | 72.927 | 60.356 | -2.983 | 1.00 | 30.89 | C |
| ATOM | 2957 | CG | PHE A 381 | 73.248 | 58.901 | -2.768 | 1.00 | 31.54 | C |
| ATOM | 2958 | CD1 | PHE A 381 | 73.315 | 58.362 | -1.497 | 1.00 | 31.69 | C |
| ATOM | 2959 | CD2 | PHE A 381 | 73.514 | 58.067 | -3.864 | 1.00 | 32.12 | C |
| ATOM | 2960 | CE1 | PHE A 381 | 73.638 | 57.007 | -1.314 | 1.00 | 32.53 | C |
| ATOM | 2961 | CE2 | PHE A 381 | 73.835 | 56.721 | -3.691 | 1.00 | 31.33 | C |
| ATOM | 2962 | CZ | PHE A 381 | 73.899 | 56.184 | -2.434 | 1.00 | 31.45 | C |
| ATOM | 2963 | N | ALA A 382 | 71.183 | 62.981 | -2.937 | 1.00 | 30.04 | N |
| ATOM | 2964 | CA | ALA A 382 | 71.098 | 64.408 | -3.190 | 1.00 | 30.51 | C |
| ATOM | 2965 | C | ALA A 382 | 70.621 | 65.173 | -1.962 | 1.00 | 30.79 | C |
| ATOM | 2966 | O | ALA A 382 | 71.052 | 66.312 | -1.727 | 1.00 | 30.61 | O |
| ATOM | 2967 | CB | ALA A 382 | 70.183 | 64.694 | -4.370 | 1.00 | 30.01 | C |
| ATOM | 2968 | N | ALA A 383 | 69.745 | 64.560 | -1.162 | 1.00 | 30.26 | N |

| ATOM | 2969 | CA | ALA | A | 383 | 69.223 | 65.248 | 0.022 | 1.00 | 29.71 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2970 | C | ALA | A | 383 | 70.261 | 65.410 | 1.144 | 1.00 | 29.75 | C |
| ATOM | 2971 | O | ALA | A | 383 | 70.060 | 66.171 | 2.091 | 1.00 | 28.38 | O |
| ATOM | 2972 | CB | ALA | A | 383 | 67.988 | 64.495 | 0.546 | 1.00 | 29.81 | C |
| ATOM | 2973 | N | GLU | A | 384 | 71.366 | 64.675 | 1.064 | 1.00 | 31.03 | N |
| ATOM | 2974 | CA | GLU | A | 384 | 72.395 | 64.811 | 2.112 | 1.00 | 33.45 | C |
| ATOM | 2975 | C | GLU | A | 384 | 72.893 | 66.272 | 2.136 | 1.00 | 34.36 | C |
| ATOM | 2976 | O | GLU | A | 384 | 73.295 | 66.806 | 3.179 | 1.00 | 33.74 | O |
| ATOM | 2977 | CB | GLU | A | 384 | 73.559 | 63.843 | 1.880 | 1.00 | 34.11 | C |
| ATOM | 2978 | CG | GLU | A | 384 | 73.176 | 62.342 | 1.981 | 1.00 | 35.75 | C |
| ATOM | 2979 | CD | GLU | A | 384 | 74.349 | 61.428 | 1.651 | 1.00 | 36.77 | C |
| ATOM | 2980 | OE1 | GLU | A | 384 | 75.379 | 61.948 | 1.203 | 1.00 | 38.21 | O |
| ATOM | 2981 | OE2 | GLU | A | 384 | 74.275 | 60.197 | 1.823 | 1.00 | 37.83 | O |
| ATOM | 2982 | N | GLU | A | 385 | 72.809 | 66.917 | 0.983 | 1.00 | 35.54 | N |
| ATOM | 2983 | CA | GLU | A | 385 | 73.220 | 68.298 | 0.853 | 1.00 | 37.71 | C |
| ATOM | 2984 | C | GLU | A | 385 | 72.353 | 69.181 | 1.739 | 1.00 | 37.00 | C |
| ATOM | 2985 | O | GLU | A | 385 | 72.826 | 70.190 | 2.252 | 1.00 | 36.68 | O |
| ATOM | 2986 | CB | GLU | A | 385 | 73.067 | 68.733 | -0.597 | 1.00 | 40.13 | C |
| ATOM | 2987 | CG | GLU | A | 385 | 73.917 | 69.904 | -0.979 | 1.00 | 45.00 | C |
| ATOM | 2988 | CD | GLU | A | 385 | 73.550 | 70.416 | -2.373 | 1.00 | 47.41 | C |
| ATOM | 2989 | OE1 | GLU | A | 385 | 73.445 | 69.586 | -3.312 | 1.00 | 49.03 | O |
| ATOM | 2990 | OE2 | GLU | A | 385 | 73.359 | 71.645 | -2.526 | 1.00 | 49.08 | O |
| ATOM | 2991 | N | ARG | A | 386 | 71.086 | 68.798 | 1.919 | 1.00 | 35.94 | N |
| ATOM | 2992 | CA | ARG | A | 386 | 70.168 | 69.575 | 2.742 | 1.00 | 35.21 | C |
| ATOM | 2993 | C | ARG | A | 386 | 70.205 | 69.137 | 4.191 | 1.00 | 34.16 | C |
| ATOM | 2994 | O | ARG | A | 386 | 69.451 | 69.655 | 4.996 | 1.00 | 34.38 | O |
| ATOM | 2995 | CB | ARG | A | 386 | 68.728 | 69.485 | 2.222 | 1.00 | 36.33 | C |
| ATOM | 2996 | CG | ARG | A | 386 | 68.519 | 70.164 | 0.880 | 1.00 | 39.04 | C |
| ATOM | 2997 | CD | ARG | A | 386 | 67.097 | 70.015 | 0.298 | 1.00 | 41.44 | C |
| ATOM | 2998 | NE | ARG | A | 386 | 66.726 | 68.613 | 0.043 | 1.00 | 44.87 | N |
| ATOM | 2999 | CZ | ARG | A | 386 | 65.476 | 68.193 | -0.222 | 1.00 | 45.47 | C |
| ATOM | 3000 | NH1 | ARG | A | 386 | 64.490 | 69.090 | -0.276 | 1.00 | 45.73 | N |
| ATOM | 3001 | NH2 | ARG | A | 386 | 65.197 | 66.883 | -0.378 | 1.00 | 44.52 | N |
| ATOM | 3002 | N | GLY | A | 387 | 71.081 | 68.194 | 4.520 | 1.00 | 33.00 | N |
| ATOM | 3003 | CA | GLY | A | 387 | 71.189 | 67.719 | 5.893 | 1.00 | 32.01 | C |
| ATOM | 3004 | C | GLY | A | 387 | 70.641 | 66.310 | 6.133 | 1.00 | 31.32 | C |
| ATOM | 3005 | O | GLY | A | 387 | 70.767 | 65.767 | 7.221 | 1.00 | 31.15 | O |
| ATOM | 3006 | N | TYR | A | 388 | 70.038 | 65.709 | 5.121 | 1.00 | 30.24 | N |
| ATOM | 3007 | CA | TYR | A | 388 | 69.498 | 64.360 | 5.287 | 1.00 | 29.34 | C |
| ATOM | 3008 | C | TYR | A | 388 | 70.600 | 63.399 | 5.698 | 1.00 | 29.19 | C |
| ATOM | 3009 | O | TYR | A | 388 | 71.681 | 63.402 | 5.087 | 1.00 | 29.34 | O |
| ATOM | 3010 | CB | TYR | A | 388 | 68.893 | 63.887 | 3.980 | 1.00 | 28.45 | C |
| ATOM | 3011 | CG | TYR | A | 388 | 68.220 | 62.524 | 4.059 | 1.00 | 27.50 | C |
| ATOM | 3012 | CD1 | TYR | A | 388 | 67.009 | 62.354 | 4.757 | 1.00 | 27.72 | C |
| ATOM | 3013 | CD2 | TYR | A | 388 | 68.718 | 61.439 | 3.331 | 1.00 | 27.21 | C |
| ATOM | 3014 | CE1 | TYR | A | 388 | 66.305 | 61.135 | 4.699 | 1.00 | 25.73 | C |
| ATOM | 3015 | CE2 | TYR | A | 388 | 68.021 | 60.218 | 3.270 | 1.00 | 26.68 | C |
| ATOM | 3016 | CZ | TYR | A | 388 | 66.805 | 60.084 | 3.959 | 1.00 | 26.90 | C |
| ATOM | 3017 | OH | TYR | A | 388 | 66.089 | 58.888 | 3.863 | 1.00 | 26.34 | O |
| ATOM | 3018 | N | THR | A | 389 | 70.337 | 62.563 | 6.710 | 1.00 | 28.23 | N |
| ATOM | 3019 | CA | THR | A | 389 | 71.339 | 61.604 | 7.172 | 1.00 | 27.98 | C |
| ATOM | 3020 | C | THR | A | 389 | 70.954 | 60.112 | 7.088 | 1.00 | 27.68 | C |
| ATOM | 3021 | O | THR | A | 389 | 71.801 | 59.243 | 7.301 | 1.00 | 27.24 | O |
| ATOM | 3022 | CB | THR | A | 389 | 71.726 | 61.866 | 8.664 | 1.00 | 28.59 | C |
| ATOM | 3023 | OG1 | THR | A | 389 | 70.548 | 61.841 | 9.491 | 1.00 | 28.52 | O |
| ATOM | 3024 | CG2 | THR | A | 389 | 72.433 | 63.242 | 8.827 | 1.00 | 28.80 | C |
| ATOM | 3025 | N | ALA | A | 390 | 69.699 | 59.802 | 6.770 | 1.00 | 28.10 | N |
| ATOM | 3026 | CA | ALA | A | 390 | 69.260 | 58.383 | 6.815 | 1.00 | 28.02 | C |
| ATOM | 3027 | C | ALA | A | 390 | 69.919 | 57.429 | 5.829 | 1.00 | 28.39 | C |
| ATOM | 3028 | O | ALA | A | 390 | 69.738 | 56.205 | 5.917 | 1.00 | 28.27 | O |
| ATOM | 3029 | CB | ALA | A | 390 | 67.714 | 58.302 | 6.749 | 1.00 | 27.44 | C |
| ATOM | 3030 | N | THR | A | 391 | 70.693 | 57.972 | 4.883 | 1.00 | 28.92 | N |
| ATOM | 3031 | CA | THR | A | 391 | 71.454 | 57.130 | 3.956 | 1.00 | 29.63 | C |
| ATOM | 3032 | C | THR | A | 391 | 72.515 | 56.388 | 4.784 | 1.00 | 30.22 | C |
| ATOM | 3033 | O | THR | A | 391 | 73.021 | 55.357 | 4.361 | 1.00 | 31.36 | O |
| ATOM | 3034 | CB | THR | A | 391 | 72.196 | 57.968 | 2.869 | 1.00 | 30.27 | C |
| ATOM | 3035 | OG1 | THR | A | 391 | 72.897 | 59.036 | 3.514 | 1.00 | 32.00 | O |
| ATOM | 3036 | CG2 | THR | A | 391 | 71.230 | 58.537 | 1.870 | 1.00 | 29.92 | C |
| ATOM | 3037 | N | LYS | A | 392 | 72.909 | 56.927 | 5.937 | 1.00 | 29.83 | N |
| ATOM | 3038 | CA | LYS | A | 392 | 73.832 | 56.190 | 6.795 | 1.00 | 30.81 | C |
| ATOM | 3039 | C | LYS | A | 392 | 72.822 | 55.520 | 7.762 | 1.00 | 29.91 | C |
| ATOM | 3040 | O | LYS | A | 392 | 72.567 | 55.997 | 8.865 | 1.00 | 28.54 | O |
| ATOM | 3041 | CB | LYS | A | 392 | 74.787 | 57.160 | 7.490 | 1.00 | 32.48 | C |
| ATOM | 3042 | CG | LYS | A | 392 | 75.842 | 57.666 | 6.474 | 1.00 | 36.53 | C |
| ATOM | 3043 | CD | LYS | A | 392 | 76.775 | 58.689 | 7.088 | 1.00 | 40.01 | C |
| ATOM | 3044 | CE | LYS | A | 392 | 77.761 | 59.232 | 6.032 | 1.00 | 42.34 | C |
| ATOM | 3045 | NZ | LYS | A | 392 | 78.358 | 60.546 | 6.508 | 1.00 | 44.43 | N |
| ATOM | 3046 | N | HIS | A | 393 | 72.235 | 54.425 | 7.276 | 1.00 | 29.19 | N |
| ATOM | 3047 | CA | HIS | A | 393 | 71.173 | 53.727 | 7.987 | 1.00 | 28.59 | C |
| ATOM | 3048 | C | HIS | A | 393 | 71.507 | 53.164 | 9.355 | 1.00 | 27.70 | C |

| ATOM | 3049 | O | HIS A 393 | 70.698 | 53.291 | 10.283 | 1.00 | 27.40 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 3050 | CB | HIS A 393 | 70.575 | 52.643 | 7.062 | 1.00 | 29.56 | C |
| ATOM | 3051 | CG | HIS A 393 | 71.520 | 51.522 | 6.742 | 1.00 | 30.75 | C |
| ATOM | 3052 | ND1 | HIS A 393 | 72.751 | 51.722 | 6.148 | 1.00 | 31.19 | N |
| ATOM | 3053 | CD2 | HIS A 393 | 71.414 | 50.185 | 6.945 | 1.00 | 30.83 | C |
| ATOM | 3054 | CE1 | HIS A 393 | 73.359 | 50.553 | 5.998 | 1.00 | 32.00 | C |
| ATOM | 3055 | NE2 | HIS A 393 | 72.568 | 49.605 | 6.473 | 1.00 | 30.52 | N |
| ATOM | 3056 | N | GLN A 394 | 72.672 | 52.546 | 9.502 | 1.00 | 26.77 | N |
| ATOM | 3057 | CA | GLN A 394 | 73.046 | 51.981 | 10.800 | 1.00 | 27.11 | C |
| ATOM | 3058 | C | GLN A 394 | 73.166 | 53.100 | 11.847 | 1.00 | 27.13 | C |
| ATOM | 3059 | O | GLN A 394 | 72.645 | 53.009 | 12.963 | 1.00 | 27.18 | O |
| ATOM | 3060 | CB | GLN A 394 | 74.377 | 51.228 | 10.665 | 1.00 | 28.40 | C |
| ATOM | 3061 | CG | GLN A 394 | 74.316 | 50.066 | 9.648 | 1.00 | 30.00 | C |
| ATOM | 3062 | CD | GLN A 394 | 73.462 | 48.867 | 10.124 | 1.00 | 32.13 | C |
| ATOM | 3063 | OE1 | GLN A 394 | 72.332 | 49.012 | 10.597 | 1.00 | 31.25 | O |
| ATOM | 3064 | NE2 | GLN A 394 | 74.011 | 47.665 | 9.957 | 1.00 | 34.96 | N |
| ATOM | 3065 | N | ARG A 395 | 73.852 | 54.172 | 11.466 | 1.00 | 26.53 | N |
| ATOM | 3066 | CA | ARG A 395 | 74.024 | 55.315 | 12.347 | 1.00 | 26.45 | C |
| ATOM | 3067 | C | ARG A 395 | 72.658 | 55.919 | 12.738 | 1.00 | 25.49 | C |
| ATOM | 3068 | O | ARG A 395 | 72.439 | 56.270 | 13.890 | 1.00 | 25.40 | O |
| ATOM | 3069 | CB | ARG A 395 | 74.836 | 56.384 | 11.608 | 1.00 | 28.74 | C |
| ATOM | 3070 | CG | ARG A 395 | 74.897 | 57.735 | 12.297 | 1.00 | 32.16 | C |
| ATOM | 3071 | CD | ARG A 395 | 75.545 | 58.764 | 11.331 | 1.00 | 35.42 | C |
| ATOM | 3072 | NE | ARG A 395 | 75.711 | 60.039 | 12.010 | 1.00 | 37.19 | N |
| ATOM | 3073 | CZ | ARG A 395 | 74.706 | 60.849 | 12.336 | 1.00 | 38.48 | C |
| ATOM | 3074 | NH1 | ARG A 395 | 73.438 | 60.533 | 12.029 | 1.00 | 38.57 | N |
| ATOM | 3075 | NH2 | ARG A 395 | 74.971 | 61.960 | 13.018 | 1.00 | 39.03 | N |
| ATOM | 3076 | N | GLU A 396 | 71.774 | 56.052 | 11.744 | 1.00 | 24.35 | N |
| ATOM | 3077 | CA | GLU A 396 | 70.455 | 56.662 | 11.922 | 1.00 | 24.00 | C |
| ATOM | 3078 | C | GLU A 396 | 69.606 | 55.998 | 13.012 | 1.00 | 23.34 | C |
| ATOM | 3079 | O | GLU A 396 | 68.835 | 56.677 | 13.680 | 1.00 | 22.51 | O |
| ATOM | 3080 | CB | GLU A 396 | 69.675 | 56.640 | 10.596 | 1.00 | 23.41 | C |
| ATOM | 3081 | CG | GLU A 396 | 68.359 | 57.490 | 10.601 | 1.00 | 23.24 | C |
| ATOM | 3082 | CD | GLU A 396 | 68.632 | 58.978 | 10.493 | 1.00 | 24.78 | C |
| ATOM | 3083 | OE1 | GLU A 396 | 69.754 | 59.343 | 10.079 | 1.00 | 23.30 | O |
| ATOM | 3084 | OE2 | GLU A 396 | 67.728 | 59.785 | 10.810 | 1.00 | 25.33 | O |
| ATOM | 3085 | N | VAL A 397 | 69.753 | 54.682 | 13.178 | 1.00 | 22.98 | N |
| ATOM | 3086 | CA | VAL A 397 | 68.968 | 53.986 | 14.187 | 1.00 | 23.28 | C |
| ATOM | 3087 | C | VAL A 397 | 69.749 | 53.689 | 15.466 | 1.00 | 24.04 | C |
| ATOM | 3088 | O | VAL A 397 | 69.286 | 52.900 | 16.311 | 1.00 | 24.21 | O |
| ATOM | 3089 | CB | VAL A 397 | 68.330 | 52.657 | 13.625 | 1.00 | 23.07 | C |
| ATOM | 3090 | CG1 | VAL A 397 | 67.326 | 52.994 | 12.491 | 1.00 | 22.37 | C |
| ATOM | 3091 | CG2 | VAL A 397 | 69.413 | 51.701 | 13.127 | 1.00 | 23.32 | C |
| ATOM | 3092 | N | GLY A 398 | 70.931 | 54.301 | 15.608 | 1.00 | 23.66 | N |
| ATOM | 3093 | CA | GLY A 398 | 71.703 | 54.133 | 16.838 | 1.00 | 23.83 | C |
| ATOM | 3094 | C | GLY A 398 | 72.782 | 53.065 | 16.940 | 1.00 | 24.32 | C |
| ATOM | 3095 | O | GLY A 398 | 73.240 | 52.759 | 18.057 | 1.00 | 24.73 | O |
| ATOM | 3096 | N | ALA A 399 | 73.200 | 52.473 | 15.827 | 1.00 | 24.57 | N |
| ATOM | 3097 | CA | ALA A 399 | 74.246 | 51.456 | 15.936 | 1.00 | 25.19 | C |
| ATOM | 3098 | C | ALA A 399 | 75.491 | 52.019 | 16.629 | 1.00 | 25.72 | C |
| ATOM | 3099 | O | ALA A 399 | 76.146 | 51.307 | 17.380 | 1.00 | 26.50 | O |
| ATOM | 3100 | CB | ALA A 399 | 74.637 | 50.897 | 14.552 | 1.00 | 24.62 | C |
| ATOM | 3101 | N | GLY A 400 | 75.798 | 53.298 | 16.391 | 1.00 | 25.95 | N |
| ATOM | 3102 | CA | GLY A 400 | 76.976 | 53.895 | 17.009 | 1.00 | 25.97 | C |
| ATOM | 3103 | C | GLY A 400 | 76.769 | 54.165 | 18.484 | 1.00 | 26.19 | C |
| ATOM | 3104 | O | GLY A 400 | 77.696 | 54.065 | 19.295 | 1.00 | 26.03 | O |
| ATOM | 3105 | N | TYR A 401 | 75.538 | 54.492 | 18.846 | 1.00 | 25.07 | N |
| ATOM | 3106 | CA | TYR A 401 | 75.211 | 54.745 | 20.228 | 1.00 | 25.10 | C |
| ATOM | 3107 | C | TYR A 401 | 75.312 | 53.422 | 20.983 | 1.00 | 25.20 | C |
| ATOM | 3108 | O | TYR A 401 | 75.941 | 53.360 | 22.043 | 1.00 | 25.74 | O |
| ATOM | 3109 | CB | TYR A 401 | 73.785 | 55.342 | 20.327 | 1.00 | 24.75 | C |
| ATOM | 3110 | CG | TYR A 401 | 73.354 | 55.686 | 21.729 | 1.00 | 24.74 | C |
| ATOM | 3111 | CD1 | TYR A 401 | 73.895 | 56.803 | 22.402 | 1.00 | 24.38 | C |
| ATOM | 3112 | CD2 | TYR A 401 | 72.442 | 54.869 | 22.419 | 1.00 | 24.58 | C |
| ATOM | 3113 | CE1 | TYR A 401 | 73.548 | 57.098 | 23.722 | 1.00 | 23.53 | C |
| ATOM | 3114 | CE2 | TYR A 401 | 72.093 | 55.144 | 23.726 | 1.00 | 24.20 | C |
| ATOM | 3115 | CZ | TYR A 401 | 72.649 | 56.256 | 24.385 | 1.00 | 25.31 | C |
| ATOM | 3116 | OH | TYR A 401 | 72.364 | 56.479 | 25.717 | 1.00 | 24.27 | O |
| ATOM | 3117 | N | PHE A 402 | 74.732 | 52.340 | 20.451 | 1.00 | 25.67 | N |
| ATOM | 3118 | CA | PHE A 402 | 74.829 | 51.085 | 21.195 | 1.00 | 26.08 | C |
| ATOM | 3119 | C | PHE A 402 | 76.253 | 50.523 | 21.188 | 1.00 | 26.81 | C |
| ATOM | 3120 | O | PHE A 402 | 76.668 | 49.880 | 22.157 | 1.00 | 26.99 | O |
| ATOM | 3121 | CB | PHE A 402 | 73.793 | 50.055 | 20.707 | 1.00 | 25.46 | C |
| ATOM | 3122 | CG | PHE A 402 | 72.393 | 50.364 | 21.204 | 1.00 | 25.66 | C |
| ATOM | 3123 | CD1 | PHE A 402 | 71.600 | 51.299 | 20.559 | 1.00 | 25.22 | C |
| ATOM | 3124 | CD2 | PHE A 402 | 71.924 | 49.810 | 22.398 | 1.00 | 25.24 | C |
| ATOM | 3125 | CE1 | PHE A 402 | 70.324 | 51.696 | 21.108 | 1.00 | 24.48 | C |
| ATOM | 3126 | CE2 | PHE A 402 | 70.683 | 50.202 | 22.944 | 1.00 | 24.76 | C |
| ATOM | 3127 | CZ | PHE A 402 | 69.888 | 51.153 | 22.281 | 1.00 | 23.91 | C |
| ATOM | 3128 | N | ASP A 403 | 77.007 | 50.765 | 20.123 | 1.00 | 27.79 | N |

| ATOM | 3129 | CA | ASP A 403 | 78.413 | 50.318 | 20.123 | 1.00 | 29.18 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 3130 | C | ASP A 403 | 79.111 | 51.048 | 21.270 | 1.00 | 28.39 | C |
| ATOM | 3131 | O | ASP A 403 | 79.947 | 50.492 | 21.956 | 1.00 | 29.36 | O |
| ATOM | 3132 | CB | ASP A 403 | 79.110 | 50.648 | 18.797 | 1.00 | 31.77 | C |
| ATOM | 3133 | CG | ASP A 403 | 78.740 | 49.666 | 17.686 | 1.00 | 35.72 | C |
| ATOM | 3134 | OD1 | ASP A 403 | 78.155 | 48.576 | 17.986 | 1.00 | 38.47 | O |
| ATOM | 3135 | OD2 | ASP A 403 | 79.036 | 49.957 | 16.495 | 1.00 | 38.40 | O |
| ATOM | 3136 | N | ARG A 404 | 78.750 | 52.296 | 21.513 | 1.00 | 29.23 | N |
| ATOM | 3137 | CA | ARG A 404 | 79.389 | 53.008 | 22.608 | 1.00 | 29.04 | C |
| ATOM | 3138 | C | ARG A 404 | 78.988 | 52.412 | 23.958 | 1.00 | 29.10 | C |
| ATOM | 3139 | O | ARG A 404 | 79.826 | 52.292 | 24.879 | 1.00 | 28.14 | O |
| ATOM | 3140 | CB | ARG A 404 | 79.053 | 54.497 | 22.603 | 1.00 | 30.36 | C |
| ATOM | 3141 | CG | ARG A 404 | 79.680 | 55.159 | 23.824 | 1.00 | 33.89 | C |
| ATOM | 3142 | CD | ARG A 404 | 79.354 | 56.609 | 23.991 | 1.00 | 37.12 | C |
| ATOM | 3143 | NE | ARG A 404 | 80.310 | 57.417 | 23.262 | 1.00 | 40.79 | N |
| ATOM | 3144 | CZ | ARG A 404 | 81.426 | 57.946 | 23.755 | 1.00 | 41.13 | C |
| ATOM | 3145 | NH1 | ARG A 404 | 81.802 | 57.788 | 25.034 | 1.00 | 40.91 | N |
| ATOM | 3146 | NH2 | ARG A 404 | 82.161 | 58.658 | 22.931 | 1.00 | 42.11 | N |
| ATOM | 3147 | N | ILE A 405 | 77.703 | 52.071 | 24.115 | 1.00 | 28.28 | N |
| ATOM | 3148 | CA | ILE A 405 | 77.281 | 51.455 | 25.382 | 1.00 | 27.68 | C |
| ATOM | 3149 | C | ILE A 405 | 78.086 | 50.147 | 25.553 | 1.00 | 27.73 | C |
| ATOM | 3150 | O | ILE A 405 | 78.598 | 49.847 | 26.643 | 1.00 | 28.31 | O |
| ATOM | 3151 | CB | ILE A 405 | 75.730 | 51.106 | 25.374 | 1.00 | 26.97 | C |
| ATOM | 3152 | CG1 | ILE A 405 | 74.895 | 52.383 | 25.470 | 1.00 | 26.02 | C |
| ATOM | 3153 | CG2 | ILE A 405 | 75.411 | 50.152 | 26.521 | 1.00 | 26.99 | C |
| ATOM | 3154 | CD1 | ILE A 405 | 73.365 | 52.175 | 25.175 | 1.00 | 27.45 | C |
| ATOM | 3155 | N | ALA A 406 | 78.227 | 49.392 | 24.470 | 1.00 | 27.73 | N |
| ATOM | 3156 | CA | ALA A 406 | 78.940 | 48.124 | 24.541 | 1.00 | 28.81 | C |
| ATOM | 3157 | C | ALA A 406 | 80.385 | 48.330 | 24.983 | 1.00 | 30.42 | C |
| ATOM | 3158 | O | ALA A 406 | 80.955 | 47.540 | 25.780 | 1.00 | 30.13 | O |
| ATOM | 3159 | CB | ALA A 406 | 78.925 | 47.442 | 23.205 | 1.00 | 27.92 | C |
| ATOM | 3160 | N | THR A 407 | 80.987 | 49.371 | 24.429 | 1.00 | 30.80 | N |
| ATOM | 3161 | CA | THR A 407 | 82.378 | 49.695 | 24.739 | 1.00 | 32.16 | C |
| ATOM | 3162 | C | THR A 407 | 82.540 | 50.243 | 26.139 | 1.00 | 32.06 | C |
| ATOM | 3163 | O | THR A 407 | 83.558 | 50.007 | 26.798 | 1.00 | 32.40 | O |
| ATOM | 3164 | CB | THR A 407 | 82.909 | 50.695 | 23.711 | 1.00 | 31.89 | C |
| ATOM | 3165 | OG1 | THR A 407 | 82.889 | 50.054 | 22.425 | 1.00 | 35.15 | O |
| ATOM | 3166 | CG2 | THR A 407 | 84.326 | 51.061 | 24.029 | 1.00 | 34.45 | C |
| ATOM | 3167 | N | THR A 408 | 81.529 | 50.973 | 26.597 | 1.00 | 31.53 | N |
| ATOM | 3168 | CA | THR A 408 | 81.555 | 51.535 | 27.938 | 1.00 | 31.93 | C |
| ATOM | 3169 | C | THR A 408 | 81.513 | 50.389 | 28.951 | 1.00 | 32.97 | C |
| ATOM | 3170 | O | THR A 408 | 82.197 | 50.410 | 29.982 | 1.00 | 32.68 | O |
| ATOM | 3171 | CB | THR A 408 | 80.345 | 52.489 | 28.155 | 1.00 | 31.44 | C |
| ATOM | 3172 | OG1 | THR A 408 | 80.443 | 53.585 | 27.232 | 1.00 | 32.02 | O |
| ATOM | 3173 | CG2 | THR A 408 | 80.329 | 53.054 | 29.565 | 1.00 | 30.84 | C |
| ATOM | 3174 | N | VAL A 409 | 80.715 | 49.375 | 28.655 | 1.00 | 33.52 | N |
| ATOM | 3175 | CA | VAL A 409 | 80.577 | 48.232 | 29.544 | 1.00 | 35.02 | C |
| ATOM | 3176 | C | VAL A 409 | 81.819 | 47.336 | 29.543 | 1.00 | 37.10 | C |
| ATOM | 3177 | O | VAL A 409 | 82.156 | 46.724 | 30.568 | 1.00 | 37.11 | O |
| ATOM | 3178 | CB | VAL A 409 | 79.343 | 47.389 | 29.149 | 1.00 | 34.65 | C |
| ATOM | 3179 | CG1 | VAL A 409 | 79.411 | 46.016 | 29.785 | 1.00 | 34.75 | C |
| ATOM | 3180 | CG2 | VAL A 409 | 78.081 | 48.102 | 29.591 | 1.00 | 34.44 | C |
| ATOM | 3181 | N | ASP A 410 | 82.483 | 47.248 | 28.390 | 1.00 | 39.09 | N |
| ATOM | 3182 | CA | ASP A 410 | 83.676 | 46.419 | 28.256 | 1.00 | 41.85 | C |
| ATOM | 3183 | C | ASP A 410 | 84.883 | 47.146 | 28.860 | 1.00 | 43.52 | C |
| ATOM | 3184 | O | ASP A 410 | 85.329 | 48.188 | 28.343 | 1.00 | 43.77 | O |
| ATOM | 3185 | CB | ASP A 410 | 83.961 | 46.130 | 26.789 | 1.00 | 42.44 | C |
| ATOM | 3186 | CG | ASP A 410 | 85.055 | 45.092 | 26.601 | 1.00 | 44.97 | C |
| ATOM | 3187 | OD1 | ASP A 410 | 85.913 | 44.916 | 27.513 | 1.00 | 45.46 | O |
| ATOM | 3188 | OD2 | ASP A 410 | 85.063 | 44.453 | 25.522 | 1.00 | 46.32 | O |
| ATOM | 3189 | N | PRO A 411 | 85.435 | 46.603 | 29.956 | 1.00 | 45.26 | N |
| ATOM | 3190 | CA | PRO A 411 | 86.594 | 47.252 | 30.590 | 1.00 | 47.07 | C |
| ATOM | 3191 | C | PRO A 411 | 87.893 | 47.148 | 29.753 | 1.00 | 48.95 | C |
| ATOM | 3192 | O | PRO A 411 | 88.824 | 47.942 | 29.931 | 1.00 | 49.22 | O |
| ATOM | 3193 | CB | PRO A 411 | 86.679 | 46.539 | 31.948 | 1.00 | 46.09 | C |
| ATOM | 3194 | CG | PRO A 411 | 86.216 | 45.133 | 31.606 | 1.00 | 45.76 | C |
| ATOM | 3195 | CD | PRO A 411 | 85.027 | 45.387 | 30.693 | 1.00 | 45.07 | C |
| ATOM | 3196 | N | ASN A 412 | 87.946 | 46.177 | 28.843 | 1.00 | 50.67 | N |
| ATOM | 3197 | CA | ASN A 412 | 89.114 | 46.007 | 27.987 | 1.00 | 53.19 | C |
| ATOM | 3198 | C | ASN A 412 | 88.933 | 46.818 | 26.693 | 1.00 | 54.90 | C |
| ATOM | 3199 | O | ASN A 412 | 89.632 | 46.609 | 25.689 | 1.00 | 55.37 | O |
| ATOM | 3200 | CB | ASN A 412 | 89.310 | 44.526 | 27.683 | 1.00 | 53.31 | C |
| ATOM | 3201 | CG | ASN A 412 | 89.666 | 43.734 | 28.927 | 1.00 | 54.08 | C |
| ATOM | 3202 | OD1 | ASN A 412 | 89.526 | 42.512 | 28.958 | 1.00 | 55.40 | O |
| ATOM | 3203 | ND2 | ASN A 412 | 90.142 | 44.427 | 29.958 | 1.00 | 54.07 | N |
| ATOM | 3204 | N | SER A 413 | 87.981 | 47.749 | 26.729 | 1.00 | 56.35 | N |
| ATOM | 3205 | CA | SER A 413 | 87.718 | 48.614 | 25.593 | 1.00 | 57.67 | C |
| ATOM | 3206 | C | SER A 413 | 87.452 | 50.016 | 26.093 | 1.00 | 58.81 | C |
| ATOM | 3207 | O | SER A 413 | 86.574 | 50.244 | 26.955 | 1.00 | 59.04 | O |
| ATOM | 3208 | CB | SER A 413 | 86.525 | 48.110 | 24.796 | 1.00 | 57.73 | C |

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ATOM   3209  OG   SER A 413     86.820  46.830  24.277  1.00 58.48           O
ATOM   3210  N    SER A 414     88.235  50.952  25.558  1.00 60.05           N
ATOM   3211  CA   SER A 414     88.108  52.355  25.929  1.00 61.21           C
ATOM   3212  C    SER A 414     87.248  53.085  24.906  1.00 61.67           C
ATOM   3213  O    SER A 414     87.212  52.733  23.715  1.00 61.43           O
ATOM   3214  CB   SER A 414     89.497  53.021  26.038  1.00 61.75           C
ATOM   3215  OG   SER A 414     90.215  52.979  24.807  1.00 62.16           O
ATOM   3216  N    THR A 415     86.533  54.088  25.401  1.00 62.61           N
ATOM   3217  CA   THR A 415     85.650  54.920  24.586  1.00 63.59           C
ATOM   3218  C    THR A 415     86.430  56.187  24.209  1.00 64.18           C
ATOM   3219  O    THR A 415     87.272  56.666  24.987  1.00 64.04           O
ATOM   3220  CB   THR A 415     84.385  55.327  25.397  1.00 63.77           C
ATOM   3221  OG1  THR A 415     84.792  55.920  26.649  1.00 64.11           O
ATOM   3222  CG2  THR A 415     83.501  54.091  25.677  1.00 63.35           C
ATOM   3223  N    THR A 416     86.178  56.722  23.019  1.00 64.98           N
ATOM   3224  CA   THR A 416     86.872  57.946  22.629  1.00 65.77           C
ATOM   3225  C    THR A 416     86.152  59.104  23.341  1.00 66.15           C
ATOM   3226  O    THR A 416     84.915  59.162  23.358  1.00 66.17           O
ATOM   3227  CB   THR A 416     86.875  58.149  21.073  1.00 65.98           C
ATOM   3228  OG1  THR A 416     85.540  58.028  20.561  1.00 66.46           O
ATOM   3229  CG2  THR A 416     87.779  57.103  20.393  1.00 66.03           C
ATOM   3230  N    ALA A 417     86.923  59.996  23.963  1.00 66.60           N
ATOM   3231  CA   ALA A 417     86.353  61.140  24.677  1.00 67.15           C
ATOM   3232  C    ALA A 417     85.568  62.007  23.703  1.00 67.56           C
ATOM   3233  O    ALA A 417     85.995  62.210  22.557  1.00 67.52           O
ATOM   3234  CB   ALA A 417     87.472  61.969  25.341  1.00 67.20           C
ATOM   3235  N    LEU A 418     84.417  62.510  24.147  1.00 68.58           N
ATOM   3236  CA   LEU A 418     83.592  63.363  23.292  1.00 69.41           C
ATOM   3237  C    LEU A 418     84.210  64.764  23.163  1.00 69.94           C
ATOM   3238  O    LEU A 418     84.417  65.212  22.009  1.00 70.29           O
ATOM   3239  CB   LEU A 418     82.158  63.463  23.849  1.00 69.24           C
ATOM   3240  CG   LEU A 418     81.305  62.186  23.890  1.00 68.93           C
ATOM   3241  CD1  LEU A 418     79.873  62.554  24.297  1.00 68.93           C
ATOM   3242  CD2  LEU A 418     81.312  61.504  22.528  1.00 68.58           C
TER    3243       LEU A 418
ATOM   3244  N    ALA B   1     32.241  15.183  22.124  1.00 54.50           N
ATOM   3245  CA   ALA B   1     31.454  16.453  22.105  1.00 53.95           C
ATOM   3246  C    ALA B   1     31.573  17.080  20.714  1.00 53.21           C
ATOM   3247  O    ALA B   1     31.025  16.569  19.717  1.00 53.55           O
ATOM   3248  CB   ALA B   1     31.990  17.446  23.197  1.00 54.57           C
ATOM   3249  N    SER B   2     32.318  18.178  20.655  1.00 51.42           N
ATOM   3250  CA   SER B   2     32.524  18.900  19.411  1.00 48.88           C
ATOM   3251  C    SER B   2     33.613  18.242  18.565  1.00 47.34           C
ATOM   3252  O    SER B   2     34.558  17.640  19.100  1.00 46.97           O
ATOM   3253  CB   SER B   2     32.937  20.349  19.743  1.00 48.85           C
ATOM   3254  OG   SER B   2     33.037  21.164  18.586  1.00 48.26           O
ATOM   3255  N    VAL B   3     33.475  18.336  17.247  1.00 45.00           N
ATOM   3256  CA   VAL B   3     34.529  17.829  16.374  1.00 43.52           C
ATOM   3257  C    VAL B   3     35.305  19.045  15.834  1.00 41.76           C
ATOM   3258  O    VAL B   3     36.238  18.880  15.041  1.00 41.03           O
ATOM   3259  CB   VAL B   3     33.983  17.014  15.160  1.00 43.65           C
ATOM   3260  CG1  VAL B   3     33.400  15.683  15.646  1.00 44.98           C
ATOM   3261  CG2  VAL B   3     32.923  17.824  14.399  1.00 44.16           C
ATOM   3262  N    VAL B   4     34.917  20.261  16.253  1.00 39.75           N
ATOM   3263  CA   VAL B   4     35.605  21.477  15.760  1.00 37.97           C
ATOM   3264  C    VAL B   4     37.087  21.482  16.144  1.00 36.65           C
ATOM   3265  O    VAL B   4     37.448  21.342  17.316  1.00 35.89           O
ATOM   3266  CB   VAL B   4     34.908  22.798  16.257  1.00 37.87           C
ATOM   3267  CG1  VAL B   4     35.736  24.039  15.828  1.00 36.49           C
ATOM   3268  CG2  VAL B   4     33.491  22.899  15.647  1.00 37.01           C
ATOM   3269  N    GLY B   5     37.942  21.580  15.131  1.00 36.12           N
ATOM   3270  CA   GLY B   5     39.379  21.589  15.362  1.00 35.39           C
ATOM   3271  C    GLY B   5     39.984  20.274  15.832  1.00 35.13           C
ATOM   3272  O    GLY B   5     41.059  20.260  16.425  1.00 34.31           O
ATOM   3273  N    THR B   6     39.303  19.152  15.590  1.00 35.42           N
ATOM   3274  CA   THR B   6     39.857  17.862  15.998  1.00 35.11           C
ATOM   3275  C    THR B   6     41.168  17.611  15.245  1.00 33.67           C
ATOM   3276  O    THR B   6     41.241  17.769  14.044  1.00 32.70           O
ATOM   3277  CB   THR B   6     38.891  16.668  15.702  1.00 36.87           C
ATOM   3278  OG1  THR B   6     37.700  16.790  16.501  1.00 38.86           O
ATOM   3279  CG2  THR B   6     39.568  15.347  16.113  1.00 37.54           C
ATOM   3280  N    PRO B   7     42.217  17.211  15.961  1.00 33.12           N
ATOM   3281  CA   PRO B   7     43.516  16.944  15.350  1.00 33.42           C
ATOM   3282  C    PRO B   7     43.475  15.821  14.318  1.00 34.33           C
ATOM   3283  O    PRO B   7     42.625  14.946  14.395  1.00 33.63           O
ATOM   3284  CB   PRO B   7     44.378  16.520  16.525  1.00 33.47           C
ATOM   3285  CG   PRO B   7     43.687  17.064  17.728  1.00 33.42           C
ATOM   3286  CD   PRO B   7     42.237  16.951  17.405  1.00 32.84           C
ATOM   3287  N    LYS B   8     44.398  15.853  13.362  1.00 34.88           N
ATOM   3288  CA   LYS B   8     44.503  14.772  12.378  1.00 35.24           C
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| ATOM | 3289 | C   | LYS | B | 8  | 45.222 | 13.650 | 13.109 | 1.00 | 35.18 | C |
|------|------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 3290 | O   | LYS | B | 8  | 45.884 | 13.892 | 14.127 | 1.00 | 35.03 | O |
| ATOM | 3291 | CB  | LYS | B | 8  | 45.382 | 15.174 | 11.203 | 1.00 | 35.14 | C |
| ATOM | 3292 | CG  | LYS | B | 8  | 44.796 | 16.189 | 10.288 | 1.00 | 35.77 | C |
| ATOM | 3293 | CD  | LYS | B | 8  | 45.892 | 16.651 | 9.324  | 1.00 | 36.53 | C |
| ATOM | 3294 | CE  | LYS | B | 8  | 45.506 | 17.954 | 8.657  | 1.00 | 36.62 | C |
| ATOM | 3295 | NZ  | LYS | B | 8  | 46.625 | 18.439 | 7.854  | 1.00 | 36.36 | N |
| ATOM | 3296 | N   | SER | B | 9  | 45.112 | 12.417 | 12.600 | 1.00 | 35.06 | N |
| ATOM | 3297 | CA  | SER | B | 9  | 45.826 | 11.294 | 13.230 | 1.00 | 34.12 | C |
| ATOM | 3298 | C   | SER | B | 9  | 47.264 | 11.350 | 12.717 | 1.00 | 33.98 | C |
| ATOM | 3299 | O   | SER | B | 9  | 47.538 | 11.969 | 11.679 | 1.00 | 33.65 | O |
| ATOM | 3300 | CB  | SER | B | 9  | 45.242 | 9.951  | 12.773 | 1.00 | 34.45 | C |
| ATOM | 3301 | OG  | SER | B | 9  | 45.585 | 9.738  | 11.414 | 1.00 | 33.51 | O |
| ATOM | 3302 | N   | ALA | B | 10 | 48.160 | 10.667 | 13.422 | 1.00 | 34.53 | N |
| ATOM | 3303 | CA  | ALA | B | 10 | 49.553 | 10.579 | 13.025 | 1.00 | 35.36 | C |
| ATOM | 3304 | C   | ALA | B | 10 | 49.630 | 9.936  | 11.640 | 1.00 | 36.58 | C |
| ATOM | 3305 | O   | ALA | B | 10 | 50.440 | 10.320 | 10.788 | 1.00 | 36.24 | O |
| ATOM | 3306 | CB  | ALA | B | 10 | 50.306 | 9.738  | 14.012 | 1.00 | 34.75 | C |
| ATOM | 3307 | N   | GLU | B | 11 | 48.774 | 8.947  | 11.396 | 1.00 | 38.12 | N |
| ATOM | 3308 | CA  | GLU | B | 11 | 48.807 | 8.281  | 10.092 | 1.00 | 39.44 | C |
| ATOM | 3309 | C   | GLU | B | 11 | 48.474 | 9.276  | 8.980  | 1.00 | 38.89 | C |
| ATOM | 3310 | O   | GLU | B | 11 | 49.133 | 9.293  | 7.943  | 1.00 | 38.72 | O |
| ATOM | 3311 | CB  | GLU | B | 11 | 47.825 | 7.095  | 10.068 | 1.00 | 41.44 | C |
| ATOM | 3312 | CG  | GLU | B | 11 | 48.177 | 5.931  | 11.036 | 1.00 | 45.13 | C |
| ATOM | 3313 | CD  | GLU | B | 11 | 48.078 | 6.282  | 12.558 | 1.00 | 47.82 | C |
| ATOM | 3314 | OE1 | GLU | B | 11 | 47.223 | 7.127  | 12.961 | 1.00 | 48.20 | O |
| ATOM | 3315 | OE2 | GLU | B | 11 | 48.866 | 5.689  | 13.358 | 1.00 | 49.01 | O |
| ATOM | 3316 | N   | GLN | B | 12 | 47.461 | 10.118 | 9.188  | 1.00 | 39.14 | N |
| ATOM | 3317 | CA  | GLN | B | 12 | 47.090 | 11.088 | 8.158  | 1.00 | 39.32 | C |
| ATOM | 3318 | C   | GLN | B | 12 | 48.240 | 12.045 | 7.856  | 1.00 | 38.74 | C |
| ATOM | 3319 | O   | GLN | B | 12 | 48.517 | 12.357 | 6.693  | 1.00 | 38.65 | O |
| ATOM | 3320 | CB  | GLN | B | 12 | 45.889 | 11.906 | 8.593  | 1.00 | 41.46 | C |
| ATOM | 3321 | CG  | GLN | B | 12 | 44.646 | 11.097 | 8.839  | 1.00 | 44.26 | C |
| ATOM | 3322 | CD  | GLN | B | 12 | 43.520 | 11.978 | 9.303  | 1.00 | 46.27 | C |
| ATOM | 3323 | OE1 | GLN | B | 12 | 42.927 | 12.713 | 8.507  | 1.00 | 46.63 | O |
| ATOM | 3324 | NE2 | GLN | B | 12 | 43.233 | 11.942 | 10.596 | 1.00 | 46.71 | N |
| ATOM | 3325 | N   | ILE | B | 13 | 48.885 | 12.517 | 8.916  | 1.00 | 37.82 | N |
| ATOM | 3326 | CA  | ILE | B | 13 | 50.010 | 13.430 | 8.787  | 1.00 | 37.77 | C |
| ATOM | 3327 | C   | ILE | B | 13 | 51.134 | 12.729 | 8.003  | 1.00 | 37.63 | C |
| ATOM | 3328 | O   | ILE | B | 13 | 51.668 | 13.300 | 7.044  | 1.00 | 36.85 | O |
| ATOM | 3329 | CB  | ILE | B | 13 | 50.520 | 13.879 | 10.201 | 1.00 | 37.47 | C |
| ATOM | 3330 | CG1 | ILE | B | 13 | 49.465 | 14.791 | 10.869 | 1.00 | 38.07 | C |
| ATOM | 3331 | CG2 | ILE | B | 13 | 51.870 | 14.572 | 10.086 | 1.00 | 37.44 | C |
| ATOM | 3332 | CD1 | ILE | B | 13 | 49.841 | 15.260 | 12.318 | 1.00 | 38.35 | C |
| ATOM | 3333 | N   | GLN | B | 14 | 51.490 | 11.501 | 8.408  | 1.00 | 37.86 | N |
| ATOM | 3334 | CA  | GLN | B | 14 | 52.542 | 10.735 | 7.710  | 1.00 | 38.49 | C |
| ATOM | 3335 | C   | GLN | B | 14 | 52.222 | 10.615 | 6.219  | 1.00 | 38.65 | C |
| ATOM | 3336 | O   | GLN | B | 14 | 53.093 | 10.758 | 5.363  | 1.00 | 38.65 | O |
| ATOM | 3337 | CB  | GLN | B | 14 | 52.665 | 9.325  | 8.303  | 1.00 | 38.56 | C |
| ATOM | 3338 | CG  | GLN | B | 14 | 53.847 | 8.567  | 7.742  | 1.00 | 38.75 | C |
| ATOM | 3339 | CD  | GLN | B | 14 | 55.146 | 9.218  | 8.118  | 1.00 | 38.98 | C |
| ATOM | 3340 | OE1 | GLN | B | 14 | 55.473 | 9.324  | 9.301  | 1.00 | 39.78 | O |
| ATOM | 3341 | NE2 | GLN | B | 14 | 55.899 | 9.673  | 7.121  | 1.00 | 39.23 | N |
| ATOM | 3342 | N   | GLN | B | 15 | 50.962 | 10.351 | 5.916  | 1.00 | 39.80 | N |
| ATOM | 3343 | CA  | GLN | B | 15 | 50.534 | 10.217 | 4.538  | 1.00 | 40.80 | C |
| ATOM | 3344 | C   | GLN | B | 15 | 50.791 | 11.493 | 3.750  | 1.00 | 40.82 | C |
| ATOM | 3345 | O   | GLN | B | 15 | 51.233 | 11.430 | 2.594  | 1.00 | 40.65 | O |
| ATOM | 3346 | CB  | GLN | B | 15 | 49.052 | 9.882  | 4.483  | 1.00 | 43.05 | C |
| ATOM | 3347 | CG  | GLN | B | 15 | 48.483 | 9.877  | 3.072  | 1.00 | 46.32 | C |
| ATOM | 3348 | CD  | GLN | B | 15 | 48.993 | 8.710  | 2.234  | 1.00 | 48.83 | C |
| ATOM | 3349 | OE1 | GLN | B | 15 | 50.189 | 8.381  | 2.253  | 1.00 | 50.49 | O |
| ATOM | 3350 | NE2 | GLN | B | 15 | 48.088 | 8.080  | 1.482  | 1.00 | 49.92 | N |
| ATOM | 3351 | N   | GLU | B | 16 | 50.502 | 12.652 | 4.358  | 1.00 | 40.20 | N |
| ATOM | 3352 | CA  | GLU | B | 16 | 50.738 | 13.935 | 3.684  | 1.00 | 39.85 | C |
| ATOM | 3353 | C   | GLU | B | 16 | 52.227 | 14.106 | 3.443  | 1.00 | 38.62 | C |
| ATOM | 3354 | O   | GLU | B | 16 | 52.641 | 14.483 | 2.353  | 1.00 | 38.34 | O |
| ATOM | 3355 | CB  | GLU | B | 16 | 50.237 | 15.115 | 4.524  | 1.00 | 41.53 | C |
| ATOM | 3356 | CG  | GLU | B | 16 | 48.733 | 15.160 | 4.697  | 1.00 | 45.12 | C |
| ATOM | 3357 | CD  | GLU | B | 16 | 48.253 | 16.348 | 5.559  | 1.00 | 47.54 | C |
| ATOM | 3358 | OE1 | GLU | B | 16 | 48.719 | 17.494 | 5.309  | 1.00 | 49.33 | O |
| ATOM | 3359 | OE2 | GLU | B | 16 | 47.412 | 16.147 | 6.473  | 1.00 | 48.30 | O |
| ATOM | 3360 | N   | TRP | B | 17 | 53.032 | 13.821 | 4.460  | 1.00 | 37.38 | N |
| ATOM | 3361 | CA  | TRP | B | 17 | 54.474 | 13.952 | 4.319  | 1.00 | 37.47 | C |
| ATOM | 3362 | C   | TRP | B | 17 | 55.018 | 13.042 | 3.209  | 1.00 | 38.42 | C |
| ATOM | 3363 | O   | TRP | B | 17 | 55.926 | 13.425 | 2.459  | 1.00 | 38.33 | O |
| ATOM | 3364 | CB  | TRP | B | 17 | 55.189 | 13.612 | 5.632  | 1.00 | 35.70 | C |
| ATOM | 3365 | CG  | TRP | B | 17 | 54.968 | 14.627 | 6.729  | 1.00 | 34.49 | C |
| ATOM | 3366 | CD1 | TRP | B | 17 | 54.233 | 15.790 | 6.647  | 1.00 | 33.64 | C |
| ATOM | 3367 | CD2 | TRP | B | 17 | 55.398 | 14.518 | 8.087  | 1.00 | 33.48 | C |
| ATOM | 3368 | NE1 | TRP | B | 17 | 54.177 | 16.401 | 7.885  | 1.00 | 33.86 | N |

| ATOM | 3369 | CE2 | TRP | B | 17 | 54.886 | 15.645 | 8.785 | 1.00 | 33.24 | C |
|------|------|-----|-----|---|----|--------|--------|-------|------|-------|---|
| ATOM | 3370 | CE3 | TRP | B | 17 | 56.166 | 13.578 | 8.787 | 1.00 | 33.41 | C |
| ATOM | 3371 | CZ2 | TRP | B | 17 | 55.116 | 15.852 | 10.149 | 1.00 | 32.92 | C |
| ATOM | 3372 | CZ3 | TRP | B | 17 | 56.400 | 13.784 | 10.155 | 1.00 | 33.74 | C |
| ATOM | 3373 | CH2 | TRP | B | 17 | 55.872 | 14.921 | 10.824 | 1.00 | 32.23 | C |
| ATOM | 3374 | N | ASP | B | 18 | 54.454 | 11.839 | 3.120 | 1.00 | 38.97 | N |
| ATOM | 3375 | CA | ASP | B | 18 | 54.903 | 10.859 | 2.127 | 1.00 | 39.90 | C |
| ATOM | 3376 | C | ASP | B | 18 | 54.445 | 11.159 | 0.720 | 1.00 | 39.92 | C |
| ATOM | 3377 | O | ASP | B | 18 | 55.148 | 10.841 | -0.239 | 1.00 | 40.56 | O |
| ATOM | 3378 | CB | ASP | B | 18 | 54.403 | 9.446 | 2.469 | 1.00 | 40.23 | C |
| ATOM· | 3379 | CG | ASP | B | 18 | 54.941 | 8.925 | 3.777 | 1.00 | 40.51 | C |
| ATOM | 3380 | OD1 | ASP | B | 18 | 55.979 | 9.398 | 4.273 | 1.00 | 40.94 | O |
| ATOM | 3381 | OD2 | ASP | B | 18 | 54.311 | 8.005 | 4.319 | 1.00 | 42.03 | O |
| ATOM | 3382 | N | THR | B | 19 | 53.288 | 11.794 | 0.577 | 1.00 | 39.85 | N |
| ATOM | 3383 | CA | THR | B | 19 | 52.780 | 12.006 | -0.756 | 1.00 | 39.56 | C |
| ATOM | 3384 | C | THR | B | 19 | 52.664 | 13.394 | -1.328 | 1.00 | 39.08 | C |
| ATOM | 3385 | O | THR | B | 19 | 52.625 | 13.537 | -2.555 | 1.00 | 39.48 | O |
| ATOM | 3386 | CB | THR | B | 19 | 51.418 | 11.341 | -0.894 | 1.00 | 40.38 | C |
| ATOM | 3387 | OG1 | THR | B | 19 | 50.457 | 12.070 | -0.135 | 1.00 | 41.62 | O |
| ATOM | 3388 | CG2 | THR | B | 19 | 51.476 | 9.926 | -0.343 | 1.00 | 40.62 | C |
| ATOM | 3389 | N | ASN | B | 20 | 52.591 | 14.421 | -0.483 | 1.00 | 37.70 | N |
| ATOM | 3390 | CA | ASN | B | 20 | 52.462 | 15.785 | -1.004 | 1.00 | 36.14 | C |
| ATOM | 3391 | C | ASN | B | 20 | 53.831 | 16.258 | -1.482 | 1.00 | 34.55 | C |
| ATOM | 3392 | O | ASN | B | 20 | 54.802 | 16.251 | -0.715 | 1.00 | 34.33 | O |
| ATOM | 3393 | CB | ASN | B | 20 | 51.927 | 16.737 | 0.086 | 1.00 | 36.63 | C |
| ATOM | 3394 | CG | ASN | B | 20 | 51.533 | 18.095 | -0.474 | 1.00 | 36.61 | C |
| ATOM | 3395 | OD1 | ASN | B | 20 | 52.149 | 18.607 | -1.394 | 1.00 | 35.74 | O |
| ATOM | 3396 | ND2 | ASN | B | 20 | 50.506 | 18.685 | 0.102 | 1.00 | 38.55 | N |
| ATOM | 3397 | N | PRO | B | 21 | 53.932 | 16.663 | -2.756 | 1.00 | 33.50 | N |
| ATOM | 3398 | CA | PRO | B | 21 | 55.215 | 17.128 | -3.281 | 1.00 | 33.42 | C |
| ATOM | 3399 | C | PRO | B | 21 | 55.780 | 18.341 | -2.517 | 1.00 | 32.72 | C |
| ATOM | 3400 | O | PRO | B | 21 | 56.973 | 18.656 | -2.618 | 1.00 | 32.15 | O |
| ATOM | 3401 | CB | PRO | B | 21 | 54.905 | 17.422 | -4.752 | 1.00 | 34.12 | C |
| ATOM | 3402 | CG | PRO | B | 21 | 53.452 | 17.724 | -4.746 | 1.00 | 34.35 | C |
| ATOM | 3403 | CD | PRO | B | 21 | 52.878 | 16.745 | -3.775 | 1.00 | 33.59 | C |
| ATOM | 3404 | N | ARG | B | 22 | 54.921 | 19.022 | -1.761 | 1.00 | 31.72 | N |
| ATOM | 3405 | CA | ARG | B | 22 | 55.373 | 20.148 | -0.949 | 1.00 | 31.10 | C |
| ATOM | 3406 | C | ARG | B | 22 | 56.506 | 19.675 | -0.015 | 1.00 | 30.99 | C |
| ATOM | 3407 | O | ARG | B | 22 | 57.446 | 20.435 | 0.294 | 1.00 | 30.43 | O |
| ATOM | 3408 | CB | ARG | B | 22 | 54.224 | 20.683 | -0.084 | 1.00 | 29.78 | C |
| ATOM | 3409 | CG | ARG | B | 22 | 54.737 | 21.638 | 1.027 | 1.00 | 29.90 | C |
| ATOM | 3410 | CD | ARG | B | 22 | 55.286 | 22.915 | 0.399 | 1.00 | 30.17 | C |
| ATOM | 3411 | NE | ARG | B | .22 | 55.623 | 23.943 | 1.380 | 1.00 | 29.34 | N |
| ATOM | 3412 | CZ | ARG | B | 22 | 56.762 | 23.997 | 2.057 | 1.00 | 28.85 | C |
| ATOM | 3413 | NH1 | ARG | B | 22 | 57.710 | 23.075 | 1.853 | 1.00 | 27.78 | N |
| ATOM | 3414 | NH2 | ARG | B | 22 | 56.940 | 24.960 | 2.972 | 1.00 | 27.52 | N |
| ATOM | 3415 | N | TRP | B | 23 | 56.415 | 18.422 | 0.428 | 1.00 | 31.16 | N |
| ATOM | 3416 | CA | TRP | B | 23 | 57.401 | 17.859 | 1.352 | 1.00 | 31.94 | C |
| ATOM | 3417 | C | TRP | B | 23 | 58.555 | 17.040 | 0.755 | 1.00 | 33.05 | C |
| ATOM | 3418 | O | TRP | B | 23 | 59.349 | 16.434 | 1.481 | 1.00 | 32.12 | O |
| ATOM | 3419 | CB | TRP | B | 23 | 56.677 | 17.051 | 2.420 | 1.00 | 31.95 | C |
| ATOM | 3420 | CG | TRP | B | 23 | 55.596 | 17.870 | 3.069 | 1.00 | 32.93 | C |
| ATOM | 3421 | CD1 | TRP | B | 23 | 54.262 | 17.575 | 3.115 | 1.00 | 33.42 | C |
| ATOM· | 3422 | CD2 | TRP | B | 23 | 55.746 | 19.166 | 3.691 | 1.00 | 32.66 | C |
| ATOM | 3423 | NE1 | TRP | B | 23 | 53.569 | 18.604 | 3.716 | 1.00 | 33.39 | N |
| ATOM | 3424 | CE2 | TRP | B | 23 | 54.452 | 19.591 | 4.085 | 1.00 | 33.41 | C |
| ATOM | 3425 | CE3 | TRP | B | 23 | 56.845 | 20.012 | 3.940 | 1.00 | 32.54 | C |
| ATOM | 3426 | CZ2 | TRP | B | 23 | 54.217 | 20.843 | 4.742 | 1.00 | 32.96 | C |
| ATOM | 3427 | CZ3 | TRP | B | 23 | 56.611 | 21.264 | 4.588 | 1.00 | 32.88 | C |
| ATOM | 3428 | CH2 | TRP | B | 23 | 55.306 | 21.656 | 4.975 | 1.00 | 31.93 | C |
| ATOM | 3429 | N | LYS | B | 24 | 58.668 | 17.068 | -0.561 | 1.00 | 34.96 | N |
| ATOM | 3430 | CA | LYS | B | 24 | 59.749 | 16.377 | -1.264 | 1.00 | 37.45 | C |
| ATOM | 3431 | C | LYS | B | 24 | 61.120 | 16.924 | -0.793 | 1.00 | 37.86 | C |
| ATOM | 3432 | O | LYS | B | 24 | 61.367 | 18.124 | -0.832 | 1.00 | 38.57 | O |
| ATOM | 3433 | CB | LYS | B | 24 | 59.570 | 16.614 | -2.767 | 1.00 | 38.70 | C |
| ATOM | 3434 | CG | LYS | B | 24 | 60.708 | 16.076 | -3.622 | 1.00 | 42.86 | C |
| ATOM | 3435 | CD | LYS | B | 24 | 60.430 | 16.318 | -5.103 | 1.00 | 44.66 | C |
| ATOM | 3436 | CE | LYS | B | 24 | 61.696 | 16.053 | -5.931 | 1.00 | 47.13 | C |
| ATOM | 3437 | NZ | LYS | B | 24 | 62.278 | 14.701 | -5.597 | 1.00 | 48.28 | N |
| ATOM | 3438 | N | ASP | B | 25 | 62.022 | 16.067 | -0.347 | 1.00 | 37.97 | N |
| ATOM | 3439 | CA | ASP | B | 25 | 63.327 | 16.564 | 0.109 | 1.00 | 38.12 | C |
| ATOM | 3440 | C | ASP | B | 25 | 63.307 | 17.383 | 1.412 | 1.00 | 36.86 | C |
| ATOM | 3441 | O | ASP | B | 25 | 64.248 | 18.129 | 1.703 | 1.00 | 35.83 | O |
| ATOM | 3442 | CB | ASP | B | 25 | 64.002 | 17.418 | -0.978 | 1.00 | 40.54 | C |
| ATOM | 3443 | CG | ASP | B | 25 | 64.099 | 16.690 | -2.315 | 1.00 | 42.40 | C |
| ATOM | 3444 | OD1 | ASP | B | 25 | 64.534 | 15.506 | -2.304 | 1.00 | 42.06 | O |
| ATOM | 3445 | OD2 | ASP | B | 25 | 63.720 | 17.318 | -3.349 | 1.00 | 43.90 | O |
| ATOM | 3446 | N | VAL | B | 26 | 62.240 | 17.253 | 2.187 | 1.00 | 36.01 | N |
| ATOM | 3447 | CA | VAL | B | 26 | 62.160 | 17.944 | 3.471 | 1.00 | 34.25 | C |
| ATOM | 3448 | C | VAL | B | 26 | 62.417 | 16.914 | 4.549 | 1.00 | 34.03 | C |

| ATOM | 3449 | O | VAL B | 26 | 61.618 | 16.004 | 4.742 | 1.00 | 34.05 | O |
|------|------|-----|-------|----|--------|--------|-------|------|-------|---|
| ATOM | 3450 | CB | VAL B | 26 | 60.766 | 18.561 | 3.716 | 1.00 | 34.33 | C |
| ATOM | 3451 | CG1 | VAL B | 26 | 60.666 | 19.054 | 5.163 | 1.00 | 33.40 | C |
| ATOM | 3452 | CG2 | VAL B | 26 | 60.518 | 19.698 | 2.738 | 1.00 | 33.10 | C |
| ATOM | 3453 | N | THR B | 27 | 63.527 | 17.057 | 5.252 | 1.00 | 33.16 | N |
| ATOM | 3454 | CA | THR B | 27 | 63.872 | 16.139 | 6.317 | 1.00 | 33.17 | C |
| ATOM | 3455 | C | THR B | 27 | 63.278 | 16.588 | 7.664 | 1.00 | 33.21 | C |
| ATOM | 3456 | O | THR B | 27 | 63.394 | 17.763 | 8.043 | 1.00 | 33.20 | O |
| ATOM | 3457 | CB | THR B | 27 | 65.411 | 16.058 | 6.471 | 1.00 | 33.89 | C |
| ATOM | 3458 | OG1 | THR B | 27 | 65.964 | 15.426 | 5.308 | 1.00 | 34.69 | O |
| ATOM | 3459 | CG2 | THR B | 27 | 65.814 | 15.289 | 7.731 | 1.00 | 34.16 | C |
| ATOM | 3460 | N | ARG B | 28 | 62.612 | 15.665 | 8.359 | 1.00 | 32.36 | N |
| ATOM | 3461 | CA | ARG B | 28 | 62.086 | 15.956 | 9.700 | 1.00 | 32.01 | C |
| ATOM | 3462 | C | ARG B | 28 | 62.674 | 14.861 | 10.567 | 1.00 | 32.39 | C |
| ATOM | 3463 | O | ARG B | 28 | 62.395 | 13.689 | 10.332 | 1.00 | 32.69 | O |
| ATOM | 3464 | CB | ARG B | 28 | 60.558 | 15.881 | 9.732 | 1.00 | 31.30 | C |
| ATOM | 3465 | CG | ARG B | 28 | 59.826 | 16.969 | 8.909 | 1.00 | 29.74 | C |
| ATOM | 3466 | CD | ARG B | 28 | 58.343 | 16.700 | 8.973 | 1.00 | 29.71 | C |
| ATOM | 3467 | NE | ARG B | 28 | 57.502 | 17.849 | 8.620 | 1.00 | 29.10 | N |
| ATOM | 3468 | CZ | ARG B | 28 | 57.087 | 18.137 | 7.394 | 1.00 | 29.31 | C |
| ATOM | 3469 | NH1 | ARG B | 28 | 57.440 | 17.366 | 6.355 | 1.00 | 28.16 | N |
| ATOM | 3470 | NH2 | ARG B | 28 | 56.268 | 19.173 | 7.205 | 1.00 | 28.41 | N |
| ATOM | 3471 | N | THR B | 29 | 63.499 | 15.234 | 11.549 | 1.00 | 32.69 | N |
| ATOM | 3472 | CA | THR B | 29 | 64.106 | 14.264 | 12.448 | 1.00 | 32.21 | C |
| ATOM | 3473 | C | THR B | 29 | 63.215 | 13.832 | 13.621 | 1.00 | 32.33 | C |
| ATOM | 3474 | O | THR B | 29 | 63.637 | 13.050 | 14.479 | 1.00 | 32.88 | O |
| ATOM | 3475 | CB | THR B | 29 | 65.481 | 14.772 | 12.968 | 1.00 | 32.41 | C |
| ATOM | 3476 | OG1 | THR B | 29 | 65.322 | 16.040 | 13.639 | 1.00 | 30.89 | O |
| ATOM | 3477 | CG2 | THR B | 29 | 66.450 | 14.931 | 11.768 | 1.00 | 31.84 | C |
| ATOM | 3478 | N | TYR B | 30 | 61.991 | 14.344 | 13.680 | 1.00 | 31.82 | N |
| ATOM | 3479 | CA | TYR B | 30 | 61.043 | 13.913 | 14.708 | 1.00 | 31.03 | C |
| ATOM | 3480 | C | TYR B | 30 | 59.975 | 13.200 | 13.905 | 1.00 | 31.34 | C |
| ATOM | 3481 | O | TYR B | 30 | 59.986 | 13.254 | 12.675 | 1.00 | 31.86 | O |
| ATOM | 3482 | CB | TYR B | 30 | 60.435 | 15.110 | 15.472 | 1.00 | 30.13 | C |
| ATOM | 3483 | CG | TYR B | 30 | 60.012 | 16.234 | 14.565 | 1.00 | 28.91 | C |
| ATOM | 3484 | CD1 | TYR B | 30 | 58.789 | 16.201 | 13.901 | 1.00 | 28.52 | C |
| ATOM | 3485 | CD2 | TYR B | 30 | 60.871 | 17.325 | 14.334 | 1.00 | 28.53 | C |
| ATOM | 3486 | CE1 | TYR B | 30 | 58.418 | 17.218 | 13.029 | 1.00 | 27.83 | C |
| ATOM | 3487 | CE2 | TYR B | 30 | 60.508 | 18.342 | 13.466 | 1.00 | 27.83 | C |
| ATOM | 3488 | CZ | TYR B | 30 | 59.287 | 18.283 | 12.817 | 1.00 | 27.67 | C |
| ATOM | 3489 | OH | TYR B | 30 | 58.955 | 19.279 | 11.930 | 1.00 | 27.16 | O |
| ATOM | 3490 | N | SER B | 31 | 59.036 | 12.545 | 14.570 | 1.00 | 32.00 | N |
| ATOM | 3491 | CA | SER B | 31 | 58.001 | 11.797 | 13.841 | 1.00 | 32.79 | C |
| ATOM | 3492 | C | SER B | 31 | 56.632 | 12.457 | 13.846 | 1.00 | 32.65 | C |
| ATOM | 3493 | O | SER B | 31 | 56.402 | 13.415 | 14.587 | 1.00 | 32.38 | O |
| ATOM | 3494 | CB | SER B | 31 | 57.799 | 10.438 | 14.494 | 1.00 | 32.69 | C |
| ATOM | 3495 | OG | SER B | 31 | 57.239 | 10.674 | 15.781 | 1.00 | 32.99 | O |
| ATOM | 3496 | N | ALA B | 32 | 55.722 | 11.881 | 13.062 | 1.00 | 32.66 | N |
| ATOM | 3497 | CA | ALA B | 32 | 54.343 | 12.360 | 12.985 | 1.00 | 33.40 | C |
| ATOM | 3498 | C | ALA B | 32 | 53.648 | 12.206 | 14.337 | 1.00 | 34.05 | C |
| ATOM | 3499 | O | ALA B | 32 | 52.824 | 13.043 | 14.710 | 1.00 | 33.64 | O |
| ATOM | 3500 | CB | ALA B | 32 | 53.582 | 11.613 | 11.926 | 1.00 | 33.62 | C |
| ATOM | 3501 | N | GLU B | 33 | 53.986 | 11.149 | 15.085 | 1.00 | 34.22 | N |
| ATOM | 3502 | CA | GLU B | 33 | 53.385 | 10.942 | 16.399 | 1.00 | 34.48 | C |
| ATOM | 3503 | C | GLU B | 33 | 53.874 | 12.049 | 17.338 | 1.00 | 33.16 | C |
| ATOM | 3504 | O | GLU B | 33 | 53.124 | 12.510 | 18.205 | 1.00 | 32.42 | O |
| ATOM | 3505 | CB | GLU B | 33 | 53.778 | 9.575 | 17.006 | 1.00 | 36.92 | C |
| ATOM | 3506 | CG | GLU B | 33 | 52.992 | 8.364 | 16.483 | 1.00 | 41.02 | C |
| ATOM | 3507 | CD | GLU B | 33 | 51.481 | 8.380 | 16.836 | 1.00 | 44.60 | C |
| ATOM | 3508 | OE1 | GLU B | 33 | 50.991 | 9.286 | 17.589 | 1.00 | 45.75 | O |
| ATOM | 3509 | OE2 | GLU B | 33 | 50.764 | 7.457 | 16.351 | 1.00 | 46.00 | O |
| ATOM | 3510 | N | ASP B | 34 | 55.136 | 12.434 | 17.178 | 1.00 | 31.60 | N |
| ATOM | 3511 | CA | ASP B | 34 | 55.719 | 13.491 | 18.002 | 1.00 | 31.91 | C |
| ATOM | 3512 | C | ASP B | 34 | 54.909 | 14.790 | 17.809 | 1.00 | 30.63 | C |
| ATOM | 3513 | O | ASP B | 34 | 54.621 | 15.486 | 18.767 | 1.00 | 31.28 | O |
| ATOM | 3514 | CB | ASP B | 34 | 57.187 | 13.747 | 17.627 | 1.00 | 32.13 | C |
| ATOM | 3515 | CG | ASP B | 34 | 58.134 | 12.651 | 18.124 | 1.00 | 34.41 | C |
| ATOM | 3516 | OD1 | ASP B | 34 | 57.783 | 11.927 | 19.101 | 1.00 | 35.35 | O |
| ATOM | 3517 | OD2 | ASP B | 34 | 59.249 | 12.528 | 17.544 | 1.00 | 34.26 | O |
| ATOM | 3518 | N | VAL B | 35 | 54.546 | 15.094 | 16.569 | 1.00 | 30.30 | N |
| ATOM | 3519 | CA | VAL B | 35 | 53.742 | 16.277 | 16.263 | 1.00 | 29.76 | C |
| ATOM | 3520 | C | VAL B | 35 | 52.366 | 16.181 | 16.936 | 1.00 | 29.96 | C |
| ATOM | 3521 | O | VAL B | 35 | 51.938 | 17.069 | 17.691 | 1.00 | 29.08 | O |
| ATOM | 3522 | CB | VAL B | 35 | 53.576 | 16.446 | 14.734 | 1.00 | 29.52 | C |
| ATOM | 3523 | CG1 | VAL B | 35 | 52.566 | 17.596 | 14.421 | 1.00 | 28.18 | C |
| ATOM | 3524 | CG2 | VAL B | 35 | 54.952 | 16.753 | 14.094 | 1.00 | 28.15 | C |
| ATOM | 3525 | N | VAL B | 36 | 51.655 | 15.088 | 16.674 | 1.00 | 30.14 | N |
| ATOM | 3526 | CA | VAL B | 36 | 50.348 | 14.925 | 17.275 | 1.00 | 28.88 | C |
| ATOM | 3527 | C | VAL B | 36 | 50.355 | 15.072 | 18.795 | 1.00 | 28.79 | C |
| ATOM | 3528 | O | VAL B | 36 | 49.424 | 15.686 | 19.363 | 1.00 | 28.48 | O |

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ATOM   3529  CB   VAL B  36    49.725  13.554  16.913  1.00 29.61       C
ATOM   3530  CG1  VAL B  36    48.361  13.392  17.640  1.00 29.50       C
ATOM   3531  CG2  VAL B  36    49.512  13.471  15.397  1.00 29.81       C
ATOM   3532  N    ALA B  37    51.367  14.501  19.457  1.00 27.94       N
ATOM   3533  CA   ALA B  37    51.448  14.563  20.914  1.00 28.31       C
ATOM   3534  C    ALA B  37    51.476  15.993  21.475  1.00 28.69       C
ATOM   3535  O    ALA B  37    51.089  16.227  22.640  1.00 28.03       O
ATOM   3536  CB   ALA B  37    52.710  13.803  21.420  1.00 28.52       C
ATOM   3537  N    LEU B  38    51.949  16.936  20.655  1.00 28.27       N
ATOM   3538  CA   LEU B  38    52.068  18.331  21.074  1.00 28.44       C
ATOM   3539  C    LEU B  38    50.851  19.166  20.747  1.00 28.42       C
ATOM   3540  O    LEU B  38    50.781  20.321  21.148  1.00 27.96       O
ATOM   3541  CB   LEU B  38    53.307  18.961  20.404  1.00 28.39       C
ATOM   3542  CG   LEU B  38    54.625  18.311  20.826  1.00 27.79       C
ATOM   3543  CD1  LEU B  38    55.744  18.709  19.868  1.00 28.15       C
ATOM   3544  CD2  LEU B  38    54.943  18.721  22.268  1.00 27.59       C
ATOM   3545  N    GLN B  39    49.880  18.585  20.045  1.00 28.23       N
ATOM   3546  CA   GLN B  39    48.702  19.326  19.644  1.00 28.52       C
ATOM   3547  C    GLN B  39    47.519  19.406  20.614  1.00 29.27       C
ATOM   3548  O    GLN B  39    46.504  20.029  20.302  1.00 29.56       O
ATOM   3549  CB   GLN B  39    48.231  18.831  18.251  1.00 28.68       C
ATOM   3550  CG   GLN B  39    49.227  19.152  17.135  1.00 29.09       C
ATOM   3551  CD   GLN B  39    48.794  18.621  15.784  1.00 29.82       C
ATOM   3552  OE1  GLN B  39    48.289  17.496  15.693  1.00 30.14       O
ATOM   3553  NE2  GLN B  39    49.004  19.413  14.714  1.00 28.68       N
ATOM   3554  N    GLY B  40    47.615  18.805  21.785  1.00 29.58       N
ATOM   3555  CA   GLY B  40    46.468  18.911  22.670  1.00 30.53       C
ATOM   3556  C    GLY B  40    45.258  18.296  21.981  1.00 31.26       C
ATOM   3557  O    GLY B  40    45.421  17.456  21.074  1.00 31.79       O
ATOM   3558  N    SER B  41    44.049  18.686  22.366  1.00 30.64       N
ATOM   3559  CA   SER B  41    42.912  18.063  21.720  1.00 30.97       C
ATOM   3560  C    SER B  41    42.130  18.912  20.746  1.00 30.70       C
ATOM   3561  O    SER B  41    41.096  18.480  20.220  1.00 30.46       O
ATOM   3562  CB   SER B  41    41.981  17.452  22.773  1.00 32.22       C
ATOM   3563  OG   SER B  41    41.444  18.421  23.615  1.00 33.88       O
ATOM   3564  N    VAL B  42    42.632  20.110  20.471  1.00 29.56       N
ATOM   3565  CA   VAL B  42    41.978  21.010  19.519  1.00 28.74       C
ATOM   3566  C    VAL B  42    43.082  21.780  18.804  1.00 27.53       C
ATOM   3567  O    VAL B  42    43.990  22.285  19.436  1.00 27.94       O
ATOM   3568  CB   VAL B  42    41.064  22.037  20.235  1.00 29.37       C
ATOM   3569  CG1  VAL B  42    40.505  23.057  19.205  1.00 29.77       C
ATOM   3570  CG2  VAL B  42    39.920  21.317  20.935  1.00 30.28       C
ATOM   3571  N    VAL B  43    43.043  21.823  17.479  1.00 27.20       N
ATOM   3572  CA   VAL B  43    44.054  22.563  16.748  1.00 26.31       C
ATOM   3573  C    VAL B  43    43.369  23.798  16.150  1.00 26.45       C
ATOM   3574  O    VAL B  43    42.412  23.664  15.354  1.00 26.00       O
ATOM   3575  CB   VAL B  43    44.672  21.701  15.615  1.00 25.59       C
ATOM   3576  CG1  VAL B  43    45.590  22.574  14.718  1.00 26.13       C
ATOM   3577  CG2  VAL B  43    45.498  20.556  16.236  1.00 25.42       C
ATOM   3578  N    GLU B  44    43.808  25.002  16.542  1.00 25.85       N
ATOM   3579  CA   GLU B  44    43.204  26.201  15.938  1.00 24.87       C
ATOM   3580  C    GLU B  44    43.592  26.241  14.491  1.00 24.73       C
ATOM   3581  O    GLU B  44    44.717  25.924  14.144  1.00 24.91       O
ATOM   3582  CB   GLU B  44    43.693  27.501  16.590  1.00 24.32       C
ATOM   3583  CG   GLU B  44    43.262  27.663  18.046  1.00 22.37       C
ATOM   3584  CD   GLU B  44    43.777  28.974  18.637  1.00 23.09       C
ATOM   3585  OE1  GLU B  44    43.093  29.999  18.503  1.00 21.95       O
ATOM   3586  OE2  GLU B  44    44.875  28.972  19.215  1.00 23.93       O
ATOM   3587  N    GLU B  45    42.652  26.621  13.634  1.00 25.22       N
ATOM   3588  CA   GLU B  45    42.946  26.765  12.224  1.00 25.48       C
ATOM   3589  C    GLU B  45    43.575  28.164  12.081  1.00 25.67       C
ATOM   3590  O    GLU B  45    43.109  29.111  12.721  1.00 25.71       O
ATOM   3591  CB   GLU B  45    41.633  26.697  11.407  1.00 27.24       C
ATOM   3592  CG   GLU B  45    41.733  27.270  10.000  1.00 30.55       C
ATOM   3593  CD   GLU B  45    42.502  26.376   9.051  1.00 33.70       C
ATOM   3594  OE1  GLU B  45    43.340  25.596   9.522  1.00 35.82       O
ATOM   3595  OE2  GLU B  45    42.282  26.453   7.811  1.00 36.70       O
ATOM   3596  N    HIS B  46    44.617  28.295  11.258  1.00 24.65       N
ATOM   3597  CA   HIS B  46    45.275  29.589  11.012  1.00 24.77       C
ATOM   3598  C    HIS B  46    45.123  29.859   9.513  1.00 24.66       C
ATOM   3599  O    HIS B  46    46.039  29.616   8.709  1.00 24.90       O
ATOM   3600  CB   HIS B  46    46.750  29.514  11.377  1.00 24.25       C
ATOM   3601  CG   HIS B  46    46.992  29.201  12.821  1.00 25.20       C
ATOM   3602  ND1  HIS B  46    46.682  30.090  13.828  1.00 23.75       N
ATOM   3603  CD2  HIS B  46    47.482  28.088  13.431  1.00 24.36       C
ATOM   3604  CE1  HIS B  46    46.970  29.542  14.997  1.00 24.75       C
ATOM   3605  NE2  HIS B  46    47.455  28.327  14.783  1.00 25.47       N
ATOM   3606  N    THR B  47    43.949  30.354   9.143  1.00 24.77       N
ATOM   3607  CA   THR B  47    43.597  30.595   7.734  1.00 24.36       C
ATOM   3608  C    THR B  47    44.623  31.394   6.926  1.00 24.66       C
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| ATOM | 3609 | O   | THR B | 47 | 45.102 | 30.955 |  5.856 | 1.00 24.72 | O |
| ATOM | 3610 | CB  | THR B | 47 | 42.243 | 31.334 |  7.680 | 1.00 24.17 | C |
| ATOM | 3611 | OG1 | THR B | 47 | 41.284 | 30.569 |  8.421 | 1.00 24.09 | O |
| ATOM | 3612 | CG2 | THR B | 47 | 41.758 | 31.588 |  6.219 | 1.00 22.82 | C |
| ATOM | 3613 | N   | LEU B | 48 | 44.948 | 32.588 |  7.407 | 1.00 23.40 | N |
| ATOM | 3614 | CA  | LEU B | 48 | 45.894 | 33.411 |  6.659 | 1.00 23.75 | C |
| ATOM | 3615 | C   | LEU B | 48 | 47.272 | 32.765 |  6.556 | 1.00 22.99 | C |
| ATOM | 3616 | O   | LEU B | 48 | 47.922 | 32.851 |  5.518 | 1.00 24.71 | O |
| ATOM | 3617 | CB  | LEU B | 48 | 45.985 | 34.829 |  7.278 | 1.00 22.72 | C |
| ATOM | 3618 | CG  | LEU B | 48 | 44.620 | 35.546 |  7.206 | 1.00 23.82 | C |
| ATOM | 3619 | CD1 | LEU B | 48 | 44.789 | 37.026 |  7.661 | 1.00 23.43 | C |
| ATOM | 3620 | CD2 | LEU B | 48 | 44.031 | 35.487 |  5.792 | 1.00 23.06 | C |
| ATOM | 3621 | N   | ALA B | 49 | 47.719 | 32.103 |  7.607 | 1.00 23.42 | N |
| ATOM | 3622 | CA  | ALA B | 49 | 49.015 | 31.454 |  7.553 | 1.00 23.24 | C |
| ATOM | 3623 | C   | ALA B | 49 | 48.968 | 30.297 |  6.531 | 1.00 24.14 | C |
| ATOM | 3624 | O   | ALA B | 49 | 49.926 | 30.063 |  5.818 | 1.00 23.20 | O |
| ATOM | 3625 | CB  | ALA B | 49 | 49.382 | 30.912 |  8.918 | 1.00 22.85 | C |
| ATOM | 3626 | N   | ARG B | 50 | 47.857 | 29.565 |  6.495 | 1.00 24.61 | N |
| ATOM | 3627 | CA  | ARG B | 50 | 47.739 | 28.449 |  5.555 | 1.00 25.05 | C |
| ATOM | 3628 | C   | ARG B | 50 | 47.688 | 28.964 |  4.133 | 1.00 25.34 | C |
| ATOM | 3629 | O   | ARG B | 50 | 48.469 | 28.540 |  3.279 | 1.00 25.69 | O |
| ATOM | 3630 | CB  | ARG B | 50 | 46.475 | 27.617 |  5.833 | 1.00 25.20 | C |
| ATOM | 3631 | CG  | ARG B | 50 | 46.286 | 26.477 |  4.768 | 1.00 27.13 | C |
| ATOM | 3632 | CD  | ARG B | 50 | 44.988 | 25.673 |  5.011 | 1.00 29.09 | C |
| ATOM | 3633 | NE  | ARG B | 50 | 44.878 | 25.324 |  6.429 | 1.00 30.69 | N |
| ATOM | 3634 | CZ  | ARG B | 50 | 45.730 | 24.516 |  7.049 | 1.00 31.40 | C |
| ATOM | 3635 | NH1 | ARG B | 50 | 46.742 | 23.955 |  6.370 | 1.00 29.76 | N |
| ATOM | 3636 | NH2 | ARG B | 50 | 45.597 | 24.309 |  8.354 | 1.00 31.26 | N |
| ATOM | 3637 | N   | ARG B | 51 | 46.778 | 29.898 |  3.870 | 1.00 25.69 | N |
| ATOM | 3638 | CA  | ARG B | 51 | 46.639 | 30.435 |  2.518 | 1.00 26.15 | C |
| ATOM | 3639 | C   | ARG B | 51 | 47.922 | 31.105 |  2.018 | 1.00 26.51 | C |
| ATOM | 3640 | O   | ARG B | 51 | 48.369 | 30.881 |  0.871 | 1.00 26.37 | O |
| ATOM | 3641 | CB  | ARG B | 51 | 45.492 | 31.452 |  2.491 | 1.00 26.70 | C |
| ATOM | 3642 | CG  | ARG B | 51 | 45.086 | 31.933 |  1.104 | 1.00 28.14 | C |
| ATOM | 3643 | CD  | ARG B | 51 | 43.847 | 32.816 |  1.280 | 1.00 29.63 | C |
| ATOM | 3644 | NE  | ARG B | 51 | 43.208 | 33.231 |  0.035 | 1.00 30.98 | N |
| ATOM | 3645 | CZ  | ARG B | 51 | 43.733 | 34.095 | -0.829 | 1.00 32.87 | C |
| ATOM | 3646 | NH1 | ARG B | 51 | 44.940 | 34.640 | -0.610 | 1.00 31.61 | N |
| ATOM | 3647 | NH2 | ARG B | 51 | 43.005 | 34.481 | -1.886 | 1.00 33.44 | N |
| ATOM | 3648 | N   | GLY B | 52 | 48.526 | 31.930 |  2.879 | 1.00 25.24 | N |
| ATOM | 3649 | CA  | GLY B | 52 | 49.739 | 32.617 |  2.474 | 1.00 24.19 | C |
| ATOM | 3650 | C   | GLY B | 52 | 50.879 | 31.656 |  2.135 | 1.00 24.29 | C |
| ATOM | 3651 | O   | GLY B | 52 | 51.584 | 31.829 |  1.158 | 1.00 23.63 | O |
| ATOM | 3652 | N   | ALA B | 53 | 51.068 | 30.652 |  2.973 | 1.00 24.45 | N |
| ATOM | 3653 | CA  | ALA B | 53 | 52.127 | 29.698 |  2.752 | 1.00 25.37 | C |
| ATOM | 3654 | C   | ALA B | 53 | 51.914 | 28.918 |  1.440 | 1.00 25.75 | C |
| ATOM | 3655 | O   | ALA B | 53 | 52.885 | 28.652 |  0.709 | 1.00 26.44 | O |
| ATOM | 3656 | CB  | ALA B | 53 | 52.199 | 28.729 |  3.953 | 1.00 24.31 | C |
| ATOM | 3657 | N   | GLU B | 54 | 50.658 | 28.567 |  1.151 | 1.00 25.89 | N |
| ATOM | 3658 | CA  | GLU B | 54 | 50.312 | 27.813 | -0.052 | 1.00 26.85 | C |
| ATOM | 3659 | C   | GLU B | 54 | 50.492 | 28.673 | -1.270 | 1.00 27.02 | C |
| ATOM | 3660 | O   | GLU B | 54 | 51.098 | 28.234 | -2.253 | 1.00 27.05 | O |
| ATOM | 3661 | CB  | GLU B | 54 | 48.864 | 27.298 |  0.026 | 1.00 28.54 | C |
| ATOM | 3662 | CG  | GLU B | 54 | 48.737 | 26.133 |  1.031 | 1.00 29.46 | C |
| ATOM | 3663 | CD  | GLU B | 54 | 47.336 | 25.523 |  1.066 | 1.00 30.77 | C |
| ATOM | 3664 | OE1 | GLU B | 54 | 46.399 | 26.103 |  0.507 | 1.00 32.13 | O |
| ATOM | 3665 | OE2 | GLU B | 54 | 47.171 | 24.466 |  1.669 | 1.00 31.60 | O |
| ATOM | 3666 | N   | VAL B | 55 | 49.994 | 29.910 | -1.209 | 1.00 26.51 | N |
| ATOM | 3667 | CA  | VAL B | 55 | 50.162 | 30.825 | -2.333 | 1.00 27.34 | C |
| ATOM | 3668 | C   | VAL B | 55 | 51.638 | 31.107 | -2.592 | 1.00 27.57 | C |
| ATOM | 3669 | O   | VAL B | 55 | 52.090 | 31.136 | -3.752 | 1.00 28.39 | O |
| ATOM | 3670 | CB  | VAL B | 55 | 49.421 | 32.177 | -2.100 | 1.00 26.53 | C |
| ATOM | 3671 | CG1 | VAL B | 55 | 49.893 | 33.248 | -3.129 | 1.00 25.11 | C |
| ATOM | 3672 | CG2 | VAL B | 55 | 47.908 | 31.932 | -2.204 | 1.00 26.97 | C |
| ATOM | 3673 | N   | LEU B | 56 | 52.396 | 31.326 | -1.526 | 1.00 27.95 | N |
| ATOM | 3674 | CA  | LEU B | 56 | 53.807 | 31.627 | -1.702 | 1.00 27.50 | C |
| ATOM | 3675 | C   | LEU B | 56 | 54.508 | 30.432 | -2.376 | 1.00 27.98 | C |
| ATOM | 3676 | O   | LEU B | 56 | 55.300 | 30.597 | -3.297 | 1.00 27.20 | O |
| ATOM | 3677 | CB  | LEU B | 56 | 54.457 | 31.910 | -0.349 | 1.00 26.75 | C |
| ATOM | 3678 | CG  | LEU B | 56 | 55.976 | 32.126 | -0.347 | 1.00 27.09 | C |
| ATOM | 3679 | CD1 | LEU B | 56 | 56.333 | 33.248 | -1.323 | 1.00 26.91 | C |
| ATOM | 3680 | CD2 | LEU B | 56 | 56.462 | 32.482 |  1.081 | 1.00 26.89 | C |
| ATOM | 3681 | N   | TRP B | 57 | 54.228 | 29.238 | -1.878 | 1.00 28.61 | N |
| ATOM | 3682 | CA  | TRP B | 57 | 54.857 | 28.049 | -2.440 | 1.00 29.97 | C |
| ATOM | 3683 | C   | TRP B | 57 | 54.538 | 27.947 | -3.940 | 1.00 30.07 | C |
| ATOM | 3684 | O   | TRP B | 57 | 55.438 | 27.754 | -4.739 | 1.00 30.08 | O |
| ATOM | 3685 | CB  | TRP B | 57 | 54.408 | 26.792 | -1.688 | 1.00 29.90 | C |
| ATOM | 3686 | CG  | TRP B | 57 | 55.125 | 25.543 | -2.144 | 1.00 30.98 | C |
| ATOM | 3687 | CD1 | TRP B | 57 | 54.585 | 24.495 | -2.850 | 1.00 31.23 | C |
| ATOM | 3688 | CD2 | TRP B | 57 | 56.495 | 25.197 | -1.893 | 1.00 30.61 | C |

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ATOM   3689  NE1 TRP B  57      55.540  23.518  -3.043  1.00 31.48        N
ATOM   3690  CE2 TRP B  57      56.717  23.926  -2.468  1.00 31.34        C
ATOM   3691  CE3 TRP B  57      57.555  25.838  -1.240  1.00 30.96        C
ATOM   3692  CZ2 TRP B  57      57.959  23.287  -2.407  1.00 31.92        C
ATOM   3693  CZ3 TRP B  57      58.780  25.210  -1.176  1.00 30.89        C
ATOM   3694  CH2 TRP B  57      58.975  23.941  -1.759  1.00 31.59        C
ATOM   3695  N   GLU B  58      53.283  28.130  -4.328  1.00 31.01        N
ATOM   3696  CA  GLU B  58      52.947  28.035  -5.739  1.00 32.18        C
ATOM   3697  C   GLU B  58      53.648  29.129  -6.560  1.00 32.07        C
ATOM   3698  O   GLU B  58      54.182  28.855  -7.642  1.00 32.00        O
ATOM   3699  CB  GLU B  58      51.424  28.082  -5.932  1.00 33.85        C
ATOM   3700  CG  GLU B  58      50.700  26.895  -5.240  1.00 37.27        C
ATOM   3701  CD  GLU B  58      51.269  25.526  -5.694  1.00 39.22        C
ATOM   3702  OE1 GLU B  58      51.414  25.354  -6.932  1.00 41.64        O
ATOM   3703  OE2 GLU B  58      51.572  24.628  -4.845  1.00 39.58        O
ATOM   3704  N   GLN B  59      53.658  30.362  -6.056  1.00 31.31        N
ATOM   3705  CA  GLN B  59      54.314  31.466  -6.768  1.00 30.91        C
ATOM   3706  C   GLN B  59      55.806  31.189  -6.990  1.00 30.10        C
ATOM   3707  O   GLN B  59      56.338  31.498  -8.049  1.00 30.05        O
ATOM   3708  CB  GLN B  59      54.163  32.789  -5.998  1.00 30.87        C
ATOM   3709  CG  GLN B  59      52.727  33.343  -5.908  1.00 31.40        C
ATOM   3710  CD  GLN B  59      52.694  34.639  -5.090  1.00 32.64        C
ATOM   3711  OE1 GLN B  59      53.545  34.839  -4.226  1.00 33.61        O
ATOM   3712  NE2 GLN B  59      51.713  35.503  -5.345  1.00 32.67        N
ATOM   3713  N   LEU B  60      56.479  30.611  -6.002  1.00 29.78        N
ATOM   3714  CA  LEU B  60      57.919  30.329  -6.150  1.00 29.94        C
ATOM   3715  C   LEU B  60      58.179  29.326  -7.316  1.00 30.93        C
ATOM   3716  O   LEU B  60      59.293  29.242  -7.851  1.00 29.76        O
ATOM   3717  CB  LEU B  60      58.497  29.793  -4.823  1.00 28.95        C
ATOM   3718  CG  LEU B  60      58.605  30.835  -3.671  1.00 28.79        C
ATOM   3719  CD1 LEU B  60      58.886  30.132  -2.334  1.00 27.82        C
ATOM   3720  CD2 LEU B  60      59.739  31.831  -3.995  1.00 27.78        C
ATOM   3721  N   HIS B  61      57.148  28.573  -7.692  1.00 32.10        N
ATOM   3722  CA  HIS B  61      57.267  27.612  -8.798  1.00 34.03        C
ATOM   3723  C   HIS B  61      56.656  28.149 -10.088  1.00 35.04        C
ATOM   3724  O   HIS B  61      57.139  27.829 -11.166  1.00 36.26        O
ATOM   3725  CB  HIS B  61      56.587  26.304  -8.419  1.00 34.00        C
ATOM   3726  CG  HIS B  61      57.254  25.610  -7.279  1.00 35.30        C
ATOM   3727  ND1 HIS B  61      58.305  24.732  -7.456  1.00 35.16        N
ATOM   3728  CD2 HIS B  61      57.086  25.727  -5.940  1.00 35.18        C
ATOM   3729  CE1 HIS B  61      58.754  24.340  -6.276  1.00 35.20        C
ATOM   3730  NE2 HIS B  61      58.036  24.927  -5.339  1.00 35.30        N
ATOM   3731  N   ASP B  62      55.619  28.984  -9.987  1.00 35.55        N
ATOM   3732  CA  ASP B  62      54.947  29.509 -11.169  1.00 35.77        C
ATOM   3733  C   ASP B  62      55.570  30.766 -11.756  1.00 36.02        C
ATOM   3734  O   ASP B  62      55.504  30.973 -12.957  1.00 36.06        O
ATOM   3735  CB  ASP B  62      53.458  29.808 -10.894  1.00 36.47        C
ATOM   3736  CG  ASP B  62      52.651  28.557 -10.493  1.00 38.70        C
ATOM   3737  OD1 ASP B  62      53.082  27.421 -10.799  1.00 39.50        O
ATOM   3738  OD2 ASP B  62      51.564  28.707  -9.875  1.00 39.88        O
ATOM   3739  N   LEU B  63      56.159  31.621 -10.928  1.00 35.30        N
ATOM   3740  CA  LEU B  63      56.716  32.869 -11.458  1.00 34.98        C
ATOM   3741  C   LEU B  63      58.206  32.741 -11.738  1.00 34.26        C
ATOM   3742  O   LEU B  63      58.849  31.849 -11.211  1.00 33.35        O
ATOM   3743  CB  LEU B  63      56.444  34.018 -10.473  1.00 35.02        C
ATOM   3744  CG  LEU B  63      54.987  34.164 -10.001  1.00 35.37        C
ATOM   3745  CD1 LEU B  63      54.913  35.242  -8.937  1.00 35.32        C
ATOM   3746  CD2 LEU B  63      54.055  34.521 -11.183  1.00 35.86        C
ATOM   3747  N   GLU B  64      58.745  33.624 -12.580  1.00 34.49        N
ATOM   3748  CA  GLU B  64      60.175  33.585 -12.910  1.00 34.65        C
ATOM   3749  C   GLU B  64      60.936  33.767 -11.588  1.00 33.38        C
ATOM   3750  O   GLU B  64      61.988  33.178 -11.376  1.00 32.93        O
ATOM   3751  CB  GLU B  64      60.501  34.689 -13.917  1.00 36.91        C
ATOM   3752  CG  GLU B  64      61.795  34.466 -14.667  1.00 40.49        C
ATOM   3753  CD  GLU B  64      62.125  35.595 -15.674  1.00 42.23        C
ATOM   3754  OE1 GLU B  64      61.196  36.335 -16.119  1.00 43.77        O
ATOM   3755  OE2 GLU B  64      63.322  35.728 -16.032  1.00 42.69        O
ATOM   3756  N   TRP B  65      60.390  34.619 -10.720  1.00 31.93        N
ATOM   3757  CA  TRP B  65      60.877  34.815  -9.356  1.00 30.55        C
ATOM   3758  C   TRP B  65      59.873  35.685  -8.600  1.00 29.91        C
ATOM   3759  O   TRP B  65      59.043  36.366  -9.206  1.00 29.92        O
ATOM   3760  CB  TRP B  65      62.299  35.412  -9.281  1.00 30.60        C
ATOM   3761  CG  TRP B  65      62.432  36.894  -9.526  1.00 31.17        C
ATOM   3762  CD1 TRP B  65      62.572  37.879  -8.579  1.00 31.19        C
ATOM   3763  CD2 TRP B  65      62.567  37.539 -10.801  1.00 31.11        C
ATOM   3764  NE1 TRP B  65      62.803  39.098  -9.195  1.00 30.80        N
ATOM   3765  CE2 TRP B  65      62.804  38.916 -10.555  1.00 31.18        C
ATOM   3766  CE3 TRP B  65      62.527  37.083 -12.131  1.00 31.41        C
ATOM   3767  CZ2 TRP B  65      63.001  39.848 -11.597  1.00 30.44        C
ATOM   3768  CZ3 TRP B  65      62.730  38.022 -13.177  1.00 30.93        C
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| ATOM | 3769 | CH2 | TRP | B | 65 | 62.962 | 39.373 | -12.898 | 1.00 | 31.64 | C |
|------|------|-----|-----|---|----|--------|--------|---------|------|-------|---|
| ATOM | 3770 | N   | VAL | B | 66 | 59.915 | 35.613 | -7.275  | 1.00 | 28.91 | N |
| ATOM | 3771 | CA  | VAL | B | 66 | 59.017 | 36.403 | -6.431  | 1.00 | 28.01 | C |
| ATOM | 3772 | C   | VAL | B | 66 | 59.850 | 37.536 | -5.827  | 1.00 | 27.73 | C |
| ATOM | 3773 | O   | VAL | B | 66 | 60.917 | 37.291 | -5.249  | 1.00 | 26.90 | O |
| ATOM | 3774 | CB  | VAL | B | 66 | 58.455 | 35.544 | -5.258  | 1.00 | 28.75 | C |
| ATOM | 3775 | CG1 | VAL | B | 66 | 57.568 | 36.421 | -4.329  | 1.00 | 27.38 | C |
| ATOM | 3776 | CG2 | VAL | B | 66 | 57.663 | 34.352 | -5.815  | 1.00 | 28.55 | C |
| ATOM | 3777 | N   | ASN | B | 67 | 59.421 | 38.782 | -5.988  | 1.00 | 27.45 | N |
| ATOM | 3778 | CA  | ASN | B | 67 | 60.227 | 39.810 | -5.348  | 1.00 | 27.57 | C |
| ATOM | 3779 | C   | ASN | B | 67 | 59.376 | 40.617 | -4.392  | 1.00 | 27.00 | C |
| ATOM | 3780 | O   | ASN | B | 67 | 58.149 | 40.643 | -4.513  | 1.00 | 26.92 | O |
| ATOM | 3781 | CB  | ASN | B | 67 | 61.001 | 40.684 | -6.355  | 1.00 | 28.05 | C |
| ATOM | 3782 | CG  | ASN | B | 67 | 60.116 | 41.439 | -7.320  | 1.00 | 30.16 | C |
| ATOM | 3783 | OD1 | ASN | B | 67 | 58.879 | 41.360 | -7.274  | 1.00 | 30.87 | O |
| ATOM | 3784 | ND2 | ASN | B | 67 | 60.763 | 42.197 | -8.223  | 1.00 | 29.76 | N |
| ATOM | 3785 | N   | ALA | B | 68 | 60.033 | 41.252 | -3.428  | 1.00 | 25.88 | N |
| ATOM | 3786 | CA  | ALA | B | 68 | 59.317 | 42.013 | -2.402  | 1.00 | 24.74 | C |
| ATOM | 3787 | C   | ALA | B | 68 | 60.156 | 43.186 | -1.885  | 1.00 | 24.26 | C |
| ATOM | 3788 | O   | ALA | B | 68 | 61.363 | 43.298 | -2.195  | 1.00 | 24.50 | O |
| ATOM | 3789 | CB  | ALA | B | 68 | 58.955 | 41.073 | -1.244  | 1.00 | 23.67 | C |
| ATOM | 3790 | N   | LEU | B | 69 | 59.502 | 44.060 | -1.118  | 1.00 | 23.13 | N |
| ATOM | 3791 | CA  | LEU | B | 69 | 60.125 | 45.244 | -0.507  | 1.00 | 22.24 | C |
| ATOM | 3792 | C   | LEU | B | 69 | 59.717 | 45.212 | 0.992   | 1.00 | 22.96 | C |
| ATOM | 3793 | O   | LEU | B | 69 | 58.563 | 44.847 | 1.300   | 1.00 | 21.88 | O |
| ATOM | 3794 | CB  | LEU | B | 69 | 59.557 | 46.527 | -1.137  | 1.00 | 21.61 | C |
| ATOM | 3795 | CG  | LEU | B | 69 | 59.785 | 46.726 | -2.644  | 1.00 | 22.49 | C |
| ATOM | 3796 | CD1 | LEU | B | 69 | 59.060 | 47.989 | -3.134  | 1.00 | 22.13 | C |
| ATOM | 3797 | CD2 | LEU | B | 69 | 61.295 | 46.846 | -2.890  | 1.00 | 21.59 | C |
| ATOM | 3798 | N   | GLY | B | 70 | 60.652 | 45.567 | 1.882   | 1.00 | 22.42 | N |
| ATOM | 3799 | CA  | GLY | B | 70 | 60.373 | 45.585 | 3.304   | 1.00 | 23.03 | C |
| ATOM | 3800 | C   | GLY | B | 70 | 59.250 | 46.572 | 3.591   | 1.00 | 23.23 | C |
| ATOM | 3801 | O   | GLY | B | 70 | 59.264 | 47.699 | 3.085   | 1.00 | 23.40 | O |
| ATOM | 3802 | N   | ALA | B | 71 | 58.270 | 46.138 | 4.386   | 1.00 | 23.33 | N |
| ATOM | 3803 | CA  | ALA | B | 71 | 57.127 | 46.972 | 4.777   | 1.00 | 22.30 | C |
| ATOM | 3804 | C   | ALA | B | 71 | 57.104 | 47.021 | 6.304   | 1.00 | 22.06 | C |
| ATOM | 3805 | O   | ALA | B | 71 | 57.220 | 45.973 | 6.961   | 1.00 | 21.30 | O |
| ATOM | 3806 | CB  | ALA | B | 71 | 55.790 | 46.343 | 4.254   | 1.00 | 21.17 | C |
| ATOM | 3807 | N   | LEU | B | 72 | 56.984 | 48.218 | 6.881   | 1.00 | 21.92 | N |
| ATOM | 3808 | CA  | LEU | B | 72 | 56.942 | 48.301 | 8.345   | 1.00 | 21.89 | C |
| ATOM | 3809 | C   | LEU | B | 72 | 55.601 | 48.826 | 8.854   | 1.00 | 21.60 | C |
| ATOM | 3810 | O   | LEU | B | 72 | 55.407 | 48.961 | 10.069  | 1.00 | 21.28 | O |
| ATOM | 3811 | CB  | LEU | B | 72 | 58.095 | 49.164 | 8.887   | 1.00 | 21.90 | C |
| ATOM | 3812 | CG  | LEU | B | 72 | 58.065 | 50.644 | 8.484   | 1.00 | 22.28 | C |
| ATOM | 3813 | CD1 | LEU | B | 72 | 58.057 | 51.512 | 9.798   | 1.00 | 21.34 | C |
| ATOM | 3814 | CD2 | LEU | B | 72 | 59.322 | 50.976 | 7.593   | 1.00 | 22.45 | C |
| ATOM | 3815 | N   | THR | B | 73 | 54.690 | 49.192 | 7.948   | 1.00 | 21.21 | N |
| ATOM | 3816 | CA  | THR | B | 73 | 53.332 | 49.583 | 8.395   | 1.00 | 20.67 | C |
| ATOM | 3817 | C   | THR | B | 73 | 52.287 | 48.904 | 7.468   | 1.00 | 20.15 | C |
| ATOM | 3818 | O   | THR | B | 73 | 52.616 | 48.429 | 6.370   | 1.00 | 19.45 | O |
| ATOM | 3819 | CB  | THR | B | 73 | 53.076 | 51.128 | 8.401   | 1.00 | 20.58 | C |
| ATOM | 3820 | OG1 | THR | B | 73 | 52.659 | 51.559 | 7.094   | 1.00 | 20.24 | O |
| ATOM | 3821 | CG2 | THR | B | 73 | 54.344 | 51.905 | 8.820   | 1.00 | 19.98 | C |
| ATOM | 3822 | N   | GLY | B | 74 | 51.042 | 48.849 | 7.938   | 1.00 | 19.76 | N |
| ATOM | 3823 | CA  | GLY | B | 74 | 49.960 | 48.266 | 7.177   | 1.00 | 19.03 | C |
| ATOM | 3824 | C   | GLY | B | 74 | 49.771 | 48.999 | 5.863   | 1.00 | 20.28 | C |
| ATOM | 3825 | O   | GLY | B | 74 | 49.703 | 48.373 | 4.814   | 1.00 | 20.09 | O |
| ATOM | 3826 | N   | ASN | B | 75 | 49.686 | 50.329 | 5.889   | 1.00 | 20.90 | N |
| ATOM | 3827 | CA  | ASN | B | 75 | 49.498 | 51.069 | 4.630   | 1.00 | 21.33 | C |
| ATOM | 3828 | C   | ASN | B | 75 | 50.663 | 50.819 | 3.625   | 1.00 | 22.18 | C |
| ATOM | 3829 | O   | ASN | B | 75 | 50.430 | 50.790 | 2.423   | 1.00 | 21.75 | O |
| ATOM | 3830 | CB  | ASN | B | 75 | 49.388 | 52.572 | 4.896   | 1.00 | 21.18 | C |
| ATOM | 3831 | CG  | ASN | B | 75 | 48.062 | 52.988 | 5.567   | 1.00 | 22.23 | C |
| ATOM | 3832 | OD1 | ASN | B | 75 | 47.236 | 52.159 | 6.032   | 1.00 | 23.82 | O |
| ATOM | 3833 | ND2 | ASN | B | 75 | 47.876 | 54.290 | 5.656   | 1.00 | 20.77 | N |
| ATOM | 3834 | N   | MET | B | 76 | 51.908 | 50.665 | 4.107   | 1.00 | 22.06 | N |
| ATOM | 3835 | CA  | MET | B | 76 | 53.012 | 50.393 | 3.182   | 1.00 | 23.55 | C |
| ATOM | 3836 | C   | MET | B | 76 | 52.733 | 49.120 | 2.392   | 1.00 | 23.45 | C |
| ATOM | 3837 | O   | MET | B | 76 | 52.895 | 49.084 | 1.155   | 1.00 | 23.46 | O |
| ATOM | 3838 | CB  | MET | B | 76 | 54.329 | 50.146 | 3.902   | 1.00 | 24.01 | C |
| ATOM | 3839 | CG  | MET | B | 76 | 54.994 | 51.365 | 4.382   | 1.00 | 26.63 | C |
| ATOM | 3840 | SD  | MET | B | 76 | 56.716 | 50.983 | 4.784   | 1.00 | 25.89 | S |
| ATOM | 3841 | CE  | MET | B | 76 | 57.166 | 52.637 | 5.332   | 1.00 | 25.25 | C |
| ATOM | 3842 | N   | ALA | B | 77 | 52.349 | 48.064 | 3.113   | 1.00 | 22.38 | N |
| ATOM | 3843 | CA  | ALA | B | 77 | 52.064 | 46.784 | 2.446   | 1.00 | 22.82 | C |
| ATOM | 3844 | C   | ALA | B | 77 | 50.909 | 46.909 | 1.452   | 1.00 | 22.64 | C |
| ATOM | 3845 | O   | ALA | B | 77 | 50.976 | 46.327 | 0.367   | 1.00 | 22.75 | O |
| ATOM | 3846 | CB  | ALA | B | 77 | 51.756 | 45.698 | 3.469   | 1.00 | 22.30 | C |
| ATOM | 3847 | N   | VAL | B | 78 | 49.861 | 47.654 | 1.816   | 1.00 | 22.07 | N |
| ATOM | 3848 | CA  | VAL | B | 78 | 48.705 | 47.849 | 0.931   | 1.00 | 22.30 | C |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 3849 | C | VAL | B | 78 | 49.168 | 48.493 | -0.378 | 1.00 | 22.75 | C |
| ATOM | 3850 | O | VAL | B | 78 | 48.760 | 48.069 | -1.483 | 1.00 | 22.20 | O |
| ATOM | 3851 | CB | VAL | B | 78 | 47.616 | 48.790 | 1.586 | 1.00 | 22.04 | C |
| ATOM | 3852 | CG1 | VAL | B | 78 | 46.501 | 49.207 | 0.558 | 1.00 | 21.35 | C |
| ATOM | 3853 | CG2 | VAL | B | 78 | 46.964 | 48.063 | 2.773 | 1.00 | 20.72 | C |
| ATOM | 3854 | N | GLN | B | 79 | 49.991 | 49.533 | -0.271 | 1.00 | 22.35 | N |
| ATOM | 3855 | CA | GLN | B | 79 | 50.471 | 50.193 | -1.489 | 1.00 | 22.87 | C |
| ATOM | 3856 | C | GLN | B | 79 | 51.336 | 49.240 | -2.322 | 1.00 | 23.49 | C |
| ATOM | 3857 | O | GLN | B | 79 | 51.296 | 49.303 | -3.557 | 1.00 | 24.29 | O |
| ATOM | 3858 | CB | GLN | B | 79 | 51.282 | 51.481 | -1.185 | 1.00 | 21.97 | C |
| ATOM | 3859 | CG | GLN | B | 79 | 50.468 | 52.691 | -0.608 | 1.00 | 21.89 | C |
| ATOM | 3860 | CD | GLN | B | 79 | 49.178 | 52.967 | -1.374 | 1.00 | 21.91 | C |
| ATOM | 3861 | OE1 | GLN | B | 79 | 49.103 | 52.772 | -2.614 | 1.00 | 23.11 | O |
| ATOM | 3862 | NE2 | GLN | B | 79 | 48.158 | 53.429 | -0.661 | 1.00 | 21.39 | N |
| ATOM | 3863 | N | GLN | B | 80 | 52.116 | 48.380 | -1.669 | 1.00 | 22.93 | N |
| ATOM | 3864 | CA | GLN | B | 80 | 52.957 | 47.442 | -2.405 | 1.00 | 23.74 | C |
| ATOM | 3865 | C | GLN | B | 80 | 52.076 | 46.505 | -3.260 | 1.00 | 24.96 | C |
| ATOM | 3866 | O | GLN | B | 80 | 52.372 | 46.240 | -4.445 | 1.00 | 23.94 | O |
| ATOM | 3867 | CB | GLN | B | 80 | 53.823 | 46.632 | -1.429 | 1.00 | 23.36 | C |
| ATOM | 3868 | CG | GLN | B | 80 | 54.916 | 47.515 | -0.787 | 1.00 | 22.20 | C |
| ATOM | 3869 | CD | GLN | B | 80 | 55.673 | 46.809 | 0.313 | 1.00 | 23.49 | C |
| ATOM | 3870 | OE1 | GLN | B | 80 | 55.353 | 45.667 | 0.674 | 1.00 | 23.12 | O |
| ATOM | 3871 | NE2 | GLN | B | 80 | 56.672 | 47.484 | 0.870 | 1.00 | 22.69 | N |
| ATOM | 3872 | N | VAL | B | 81 | 50.986 | 46.020 | -2.669 | 1.00 | 24.64 | N |
| ATOM | 3873 | CA | VAL | B | 81 | 50.104 | 45.129 | -3.407 | 1.00 | 25.84 | C |
| ATOM | 3874 | C | VAL | B | 81 | 49.362 | 45.917 | -4.480 | 1.00 | 26.68 | C |
| ATOM | 3875 | O | VAL | B | 81 | 49.255 | 45.465 | -5.623 | 1.00 | 27.17 | O |
| ATOM | 3876 | CB | VAL | B | 81 | 49.117 | 44.425 | -2.459 | 1.00 | 25.54 | C |
| ATOM | 3877 | CG1 | VAL | B | 81 | 48.106 | 43.613 | -3.272 | 1.00 | 25.37 | C |
| ATOM | 3878 | CG2 | VAL | B | 81 | 49.900 | 43.500 | -1.533 | 1.00 | 25.81 | C |
| ATOM | 3879 | N | ARG | B | 82 | 48.868 | 47.098 | -4.118 | 1.00 | 26.89 | N |
| ATOM | 3880 | CA | ARG | B | 82 | 48.165 | 47.940 | -5.069 | 1.00 | 27.94 | C |
| ATOM | 3881 | C | ARG | B | 82 | 49.052 | 48.195 | -6.284 | 1.00 | 27.87 | C |
| ATOM | 3882 | O | ARG | B | 82 | 48.550 | 48.232 | -7.419 | 1.00 | 27.86 | O |
| ATOM | 3883 | CB | ARG | B | 82 | 47.785 | 49.283 | -4.432 | 1.00 | 28.99 | C |
| ATOM | 3884 | CG | ARG | B | 82 | 47.342 | 50.347 | -5.396 | 1.00 | 31.37 | C |
| ATOM | 3885 | CD | ARG | B | 82 | 45.873 | 50.649 | -5.207 | 1.00 | 34.87 | C |
| ATOM | 3886 | NE | ARG | B | 82 | 45.029 | 49.782 | -6.013 | 1.00 | 37.56 | N |
| ATOM | 3887 | CZ | ARG | B | 82 | 43.737 | 49.582 | -5.773 | 1.00 | 38.40 | C |
| ATOM | 3888 | NH1 | ARG | B | 82 | 43.139 | 50.174 | -4.752 | 1.00 | 40.91 | N |
| ATOM | 3889 | NH2 | ARG | B | 82 | 43.040 | 48.799 | -6.555 | 1.00 | 40.23 | N |
| ATOM | 3890 | N | ALA | B | 83 | 50.344 | 48.373 | -6.045 | 1.00 | 26.82 | N |
| ATOM | 3891 | CA | ALA | B | 83 | 51.322 | 48.665 | -7.106 | 1.00 | 27.27 | C |
| ATOM | 3892 | C | ALA | B | 83 | 51.711 | 47.450 | -7.928 | 1.00 | 27.66 | C |
| ATOM | 3893 | O | ALA | B | 83 | 52.479 | 47.576 | -8.888 | 1.00 | 28.15 | O |
| ATOM | 3894 | CB | ALA | B | 83 | 52.603 | 49.317 | -6.508 | 1.00 | 26.12 | C |
| ATOM | 3895 | N | GLY | B | 84 | 51.224 | 46.281 | -7.530 | 1.00 | 27.58 | N |
| ATOM | 3896 | CA | GLY | B | 84 | 51.501 | 45.063 | -8.276 | 1.00 | 27.96 | C |
| ATOM | 3897 | C | GLY | B | 84 | 52.424 | 44.015 | -7.703 | 1.00 | 28.09 | C |
| ATOM | 3898 | O | GLY | B | 84 | 52.682 | 43.018 | -8.371 | 1.00 | 27.87 | O |
| ATOM | 3899 | N | LEU | B | 85 | 52.926 | 44.202 | -6.482 | 1.00 | 27.08 | N |
| ATOM | 3900 | CA | LEU | B | 85 | 53.838 | 43.212 | -5.937 | 1.00 | 26.58 | C |
| ATOM | 3901 | C | LEU | B | 85 | 53.016 | 42.031 | -5.434 | 1.00 | 27.02 | C |
| ATOM | 3902 | O | LEU | B | 85 | 51.859 | 42.197 | -5.034 | 1.00 | 25.78 | O |
| ATOM | 3903 | CB | LEU | B | 85 | 54.692 | 43.829 | -4.829 | 1.00 | 25.79 | C |
| ATOM | 3904 | CG | LEU | B | 85 | 55.590 | 45.002 | -5.313 | 1.00 | 25.85 | C |
| ATOM | 3905 | CD1 | LEU | B | 85 | 56.509 | 45.426 | -4.147 | 1.00 | 24.99 | C |
| ATOM | 3906 | CD2 | LEU | B | 85 | 56.463 | 44.589 | -6.524 | 1.00 | 25.85 | C |
| ATOM | 3907 | N | LYS | B | 86 | 53.621 | 40.850 | -5.449 | 1.00 | 27.37 | N |
| ATOM | 3908 | CA | LYS | B | 86 | 52.904 | 39.649 | -5.091 | 1.00 | 29.40 | C |
| ATOM | 3909 | C | LYS | B | 86 | 53.252 | 39.062 | -3.749 | 1.00 | 29.04 | C |
| ATOM | 3910 | O | LYS | B | 86 | 52.658 | 38.055 | -3.374 | 1.00 | 30.38 | O |
| ATOM | 3911 | CB | LYS | B | 86 | 53.112 | 38.567 | -6.168 | 1.00 | 31.51 | C |
| ATOM | 3912 | CG | LYS | B | 86 | 52.741 | 39.003 | -7.589 | 1.00 | 34.82 | C |
| ATOM | 3913 | CD | LYS | B | 86 | 51.361 | 39.638 | -7.600 | 1.00 | 37.64 | C |
| ATOM | 3914 | CE | LYS | B | 86 | 50.906 | 40.061 | -9.039 | 1.00 | 39.62 | C |
| ATOM | 3915 | NZ | LYS | B | 86 | 50.744 | 38.870 | -9.908 | 1.00 | 41.05 | N |
| ATOM | 3916 | N | ALA | B | 87 | 54.213 | 39.665 | -3.047 | 1.00 | 27.28 | N |
| ATOM | 3917 | CA | ALA | B | 87 | 54.618 | 39.202 | -1.732 | 1.00 | 26.11 | C |
| ATOM | 3918 | C | ALA | B | 87 | 55.059 | 40.407 | -0.901 | 1.00 | 25.91 | C |
| ATOM | 3919 | O | ALA | B | 87 | 55.389 | 41.470 | -1.465 | 1.00 | 24.38 | O |
| ATOM | 3920 | CB | ALA | B | 87 | 55.784 | 38.225 | -1.843 | 1.00 | 25.84 | C |
| ATOM | 3921 | N | ILE | B | 88 | 55.066 | 40.238 | 0.427 | 1.00 | 25.24 | N |
| ATOM | 3922 | CA | ILE | B | 88 | 55.525 | 41.307 | 1.330 | 1.00 | 25.19 | C |
| ATOM | 3923 | C | ILE | B | 88 | 56.719 | 40.811 | 2.154 | 1.00 | 24.99 | C |
| ATOM | 3924 | O | ILE | B | 88 | 56.725 | 39.666 | 2.607 | 1.00 | 25.88 | O |
| ATOM | 3925 | CB | ILE | B | 88 | 54.377 | 41.738 | 2.263 | 1.00 | 25.77 | C |
| ATOM | 3926 | CG1 | ILE | B | 88 | 53.224 | 42.235 | 1.383 | 1.00 | 27.06 | C |
| ATOM | 3927 | CG2 | ILE | B | 88 | 54.830 | 42.906 | 3.209 | 1.00 | 24.86 | C |
| ATOM | 3928 | CD1 | ILE | B | 88 | 51.991 | 42.346 | 2.092 | 1.00 | 29.40 | C |

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ATOM   3929  N    TYR B  89      57.757  41.624   2.294  1.00 24.36           N
ATOM   3930  CA   TYR B  89      58.898  41.236   3.114  1.00 23.99           C
ATOM   3931  C    TYR B  89      58.796  42.019   4.428  1.00 24.01           C
ATOM   3932  O    TYR B  89      58.682  43.238   4.415  1.00 24.95           O
ATOM   3933  CB   TYR B  89      60.252  41.568   2.442  1.00 23.37           C
ATOM   3934  CG   TYR B  89      61.420  41.221   3.355  1.00 22.22           C
ATOM   3935  CD1  TYR B  89      61.668  39.898   3.725  1.00 22.28           C
ATOM   3936  CD2  TYR B  89      62.209  42.234   3.930  1.00 22.01           C
ATOM   3937  CE1  TYR B  89      62.674  39.595   4.670  1.00 22.35           C
ATOM   3938  CE2  TYR B  89      63.208  41.955   4.855  1.00 21.29           C
ATOM   3939  CZ   TYR B  89      63.424  40.641   5.222  1.00 22.79           C
ATOM   3940  OH   TYR B  89      64.352  40.363   6.177  1.00 24.23           O
ATOM   3941  N    LEU B  90      58.814  41.336   5.561  1.00 23.68           N
ATOM   3942  CA   LEU B  90      58.711  42.054   6.825  1.00 23.25           C
ATOM   3943  C    LEU B  90      60.090  42.040   7.465  1.00 23.36           C
ATOM   3944  O    LEU B  90      60.512  41.046   8.063  1.00 23.14           O
ATOM   3945  CB   LEU B  90      57.716  41.365   7.751  1.00 23.14           C
ATOM   3946  CG   LEU B  90      56.995  42.337   8.697  1.00 23.64           C
ATOM   3947  CD1  LEU B  90      55.909  41.609   9.441  1.00 23.17           C
ATOM   3948  CD2  LEU B  90      58.009  42.899   9.720  1.00 22.74           C
ATOM   3949  N    SER B  91      60.786  43.156   7.325  1.00 22.70           N
ATOM   3950  CA   SER B  91      62.127  43.299   7.842  1.00 22.92           C
ATOM   3951  C    SER B  91      62.238  43.444   9.354  1.00 22.46           C
ATOM   3952  O    SER B  91      61.550  44.281   9.950  1.00 22.79           O
ATOM   3953  CB   SER B  91      62.766  44.539   7.179  1.00 22.60           C
ATOM   3954  OG   SER B  91     ·63.959  44.900   7.837  1.00 22.21           O
ATOM   3955  N    GLY B  92      63.122  42.654   9.974  1.00 22.00           N
ATOM   3956  CA   GLY B  92      63.345  42.778  11.402  1.00 21.86           C
ATOM   3957  C    GLY B  92      64.121  44.053  11.712  1.00 23.17           C
ATOM   3958  O    GLY B  92      63.910  44.715  12.756  1.00 23.50           O
ATOM   3959  N    TRP B  93      65.005  44.430  10.787  1.00 22.75           N
ATOM   3960  CA   TRP B  93      65.816  45.643  10.929  1.00 22.49           C
ATOM   3961  C    TRP B  93      64.874  46.881  11.021  1.00 21.76           C
ATOM   3962  O    TRP B  93      65.054  47.746  11.872  1.00 21.83           O
ATOM   3963  CB   TRP B  93      66.756  45.744   9.702  1.00 22.69           C
ATOM   3964  CG   TRP B  93      67.817  46.791   9.794  1.00 24.21           C
ATOM   3965  CD1  TRP B  93      69.156  46.581   9.979  1.00 24.28           C
ATOM   3966  CD2  TRP B  93      67.640  48.222   9.704  1.00 23.86           C
ATOM   3967  NE1  TRP B  93      69.819  47.787  10.014  1.00 25.18           N
ATOM   3968  CE2  TRP B  93      68.919  48.808   9.847  1.00 24.21           C
ATOM   3969  CE3  TRP B  93      66.527  49.060   9.515  1.00 24.14           C
ATOM   3970  CZ2  TRP B  93      69.125  50.189   9.814  1.00 24.67           C
ATOM   3971  CZ3  TRP B  93      66.735  50.480   9.474  1.00 23.85           C
ATOM   3972  CH2  TRP B  93      68.022  51.009   9.628  1.00 24.00           C
ATOM   3973  N    GLN B  94      63.886  46.966  10.134  1.00 21.66           N
ATOM   3974  CA   GLN B  94      62.947  48.098  10.131  1.00 21.60           C
ATOM   3975  C    GLN B  94      62.091  48.148  11.410  1.00 21.51           C
ATOM   3976  O    GLN B  94      61.714  49.220  11.897  1.00 22.17           O
ATOM   3977  CB   GLN B  94      62.030  48.008   8.898  1.00 21.31           C
ATOM   3978  CG   GLN B  94      62.771  48.068   7.540  1.00 21.19           C
ATOM   3979  CD   GLN B  94      61.826  48.203   6.353  1.00 22.31           C
ATOM   3980  OE1  GLN B  94      60.717  47.591   6.320  1.00 23.35           O
ATOM   3981  NE2  GLN B  94      62.250  48.968   5.358  1.00 20.69           N
ATOM   3982  N    VAL B  95      61.749  46.968  11.924  1.00 21.03           N
ATOM   3983  CA   VAL B  95      60.939  46.843  13.143  1.00 20.45           C
ATOM   3984  C    VAL B  95      61.784  47.366  14.283  1.00 19.99           C
ATOM   3985  O    VAL B  95      61.322  48.164  15.111  1.00 20.58           O
ATOM   3986  CB   VAL B  95      60.526  45.353  13.334  1.00 20.14           C
ATOM   3987  CG1  VAL B  95      60.193  45.048  14.779  1.00 20.57           C
ATOM   3988  CG2  VAL B  95      59.323  45.057  12.389  1.00 19.54           C
ATOM   3989  N    ALA B  96      63.039  46.952  14.302  1.00 19.92           N
ATOM   3990  CA   ALA B  96      63.970  47.429  15.316  1.00 21.33           C
ATOM   3991  C    ALA B  96      64.072  48.960  15.248  1.00 21.52           C
ATOM   3992  O    ALA B  96      63.995  49.669  16.272  1.00 21.79           O
ATOM   3993  CB   ALA B  96      65.365  46.817  15.076  1.00 21.19           C
ATOM   3994  N    GLY B  97      64.211  49.476  14.034  1.00 21.73           N
ATOM   3995  CA   GLY B  97      64.384  50.912  13.898  1.00 21.25           C
ATOM   3996  C    GLY B  97      63.137  51.769  14.028  1.00 22.34           C
ATOM   3997  O    GLY B  97      63.282  52.922  14.455  1.00 22.53           O
ATOM   3998  N    ASP B  98      61.921  51.245  13.755  1.00 20.69           N
ATOM   3999  CA   ASP B  98      60.766  52.145  13.777  1.00 20.94           C
ATOM   4000  C    ASP B  98      59.386  51.475  14.009  1.00 21.31           C
ATOM   4001  O    ASP B  98      58.341  52.130  13.855  1.00 20.41           O
ATOM   4002  CB   ASP B  98      60.779  52.929  12.436  1.00 20.30           C
ATOM   4003  CG   ASP B  98      59.974  54.248  12.473  1.00 21.12           C
ATOM   4004  OD1  ASP B  98      59.864  54.883  13.543  1.00 22.11           O
ATOM   4005  OD2  ASP B  98      59.453  54.655  11.407  1.00 21.65           O
ATOM   4006  N    ALA B  99      59.374  50.193  14.392  1.00 20.73           N
ATOM   4007  CA   ALA B  99      58.087  49.540  14.608  1.00 21.50           C
ATOM   4008  C    ALA B  99      58.111  48.346  15.556  1.00 22.12           C
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| ATOM | 4009 | O | ALA | B | 99 | 57.567 | 47.286 | 15.209 | 1.00 | 21.99 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4010 | CB | ALA | B | 99 | 57.492 | 49.130 | 13.243 | 1.00 | 21.37 | C |
| ATOM | 4011 | N | ASN | B | 100 | 58.700 | 48.509 | 16.750 | 1.00 | 21.00 | N |
| ATOM | 4012 | CA | ASN | B | 100 | 58.754 | 47.402 | 17.702 | 1.00 | 20.81 | C |
| ATOM | 4013 | C | ASN | B | 100 | 58.068 | 47.745 | 19.017 | 1.00 | 20.67 | C |
| ATOM | 4014 | O | ASN | B | 100 | 57.833 | 48.928 | 19.342 | 1.00 | 20.08 | O |
| ATOM | 4015 | CB | ASN | B | 100 | 60.191 | 46.894 | 17.935 | 1.00 | 20.59 | C |
| ATOM | 4016 | CG | ASN | B | 100 | 61.049 | 47.881 | 18.687 | 1.00 | 21.63 | C |
| ATOM | 4017 | OD1 | ASN | B | 100 | 61.829 | 48.639 | 18.068 | 1.00 | 25.09 | O |
| ATOM | 4018 | ND2 | ASN | B | 100 | 60.939 | 47.892 | 19.985 | 1.00 | 18.46 | N |
| ATOM | 4019 | N | LEU | B | 101 | 57.747 | 46.705 | 19.777 | 1.00 | 19.86 | N |
| ATOM | 4020 | CA | LEU | B | 101 | 56.940 | 46.893 | 20.973 | 1.00 | 20.64 | C |
| ATOM | 4021 | C | LEU | B | 101 | 57.583 | 47.583 | 22.178 | 1.00 | 20.83 | C |
| ATOM | 4022 | O | LEU | B | 101 | 56.889 | 47.850 | 23.165 | 1.00 | 20.84 | O |
| ATOM | 4023 | CB | LEU | B | 101 | 56.298 | 45.532 | 21.380 | 1.00 | 20.03 | C |
| ATOM | 4024 | CG | LEU | B | 101 | 55.403 | 44.949 | 20.254 | 1.00 | 21.49 | C |
| ATOM | 4025 | CD1 | LEU | B | 101 | 55.097 | 43.468 | 20.534 | 1.00 | 21.76 | C |
| ATOM | 4026 | CD2 | LEU | B | 101 | 54.077 | 45.761 | 20.161 | 1.00 | 22.15 | C |
| ATOM | 4027 | N | SER | B | 102 | 58.881 | 47.866 | 22.125 | 1.00 | 20.23 | N |
| ATOM | 4028 | CA | SER | B | 102 | 59.486 | 48.604 | 23.247 | 1.00 | 20.59 | C |
| ATOM | 4029 | C | SER | B | 102 | 59.187 | 50.107 | 23.074 | 1.00 | 20.49 | C |
| ATOM | 4030 | O | SER | B | 102 | 59.279 | 50.873 | 24.049 | 1.00 | 21.40 | O |
| ATOM | 4031 | CB | SER | B | 102 | 61.026 | 48.453 | 23.250 | 1.00 | 20.87 | C |
| ATOM | 4032 | OG | SER | B | 102 | 61.619 | 49.207 | 22.183 | 1.00 | 21.35 | O |
| ATOM | 4033 | N | GLY | B | 103 | 58.869 | 50.515 | 21.840 | 1.00 | 20.34 | N |
| ATOM | 4034 | CA | GLY | B | 103 | 58.639 | 51.925 | 21.535 | 1.00 | 20.42 | C |
| ATOM | 4035 | C | GLY | B | 103 | 59.961 | 52.646 | 21.224 | 1.00 | 21.04 | C |
| ATOM | 4036 | O | GLY | B | 103 | 59.987 | 53.836 | 20.853 | 1.00 | 20.16 | O |
| ATOM | 4037 | N | HIS | B | 104 | 61.071 | 51.922 | 21.354 | 1.00 | 20.86 | N |
| ATOM | 4038 | CA | HIS | B | 104 | 62.380 | 52.520 | 21.103 | 1.00 | 21.23 | C |
| ATOM | 4039 | C | HIS | B | 104 | 62.964 | 52.300 | 19.727 | 1.00 | 21.61 | C |
| ATOM | 4040 | O | HIS | B | 104 | 62.566 | 51.372 | 19.012 | 1.00 | 21.41 | O |
| ATOM | 4041 | CB | HIS | B | 104 | 63.387 | 52.040 | 22.163 | 1.00 | 21.83 | C |
| ATOM | 4042 | CG | HIS | B | 104 | 63.133 | 52.623 | 23.522 | 1.00 | 23.10 | C |
| ATOM | 4043 | ND1 | HIS | B | 104 | 63.273 | 53.974 | 23.783 | 1.00 | 23.24 | N |
| ATOM | 4044 | CD2 | HIS | B | 104 | 62.753 | 52.044 | 24.693 | 1.00 | 22.99 | C |
| ATOM | 4045 | CE1 | HIS | B | 104 | 62.999 | 54.203 | 25.063 | 1.00 | 24.61 | C |
| ATOM | 4046 | NE2 | HIS | B | 104 | 62.677 | 53.049 | 25.637 | 1.00 | 24.32 | N |
| ATOM | 4047 | N | THR | B | 105 | 63.893 | 53.184 | 19.334 | 1.00 | 21.80 | N |
| ATOM | 4048 | CA | THR | B | 105 | 64.599 | 53.024 | 18.049 | 1.00 | 20.95 | C |
| ATOM | 4049 | C | THR | B | 105 | 65.837 | 52.179 | 18.355 | 1.00 | 21.73 | C |
| ATOM | 4050 | O | THR | B | 105 | 66.638 | 52.533 | 19.223 | 1.00 | 21.15 | O |
| ATOM | 4051 | CB | THR | B | 105 | 65.067 | 54.387 | 17.503 | 1.00 | 21.77 | C |
| ATOM | 4052 | OG1 | THR | B | 105 | 63.900 | 55.162 | 17.195 | 1.00 | 22.19 | O |
| ATOM | 4053 | CG2 | THR | B | 105 | 65.917 | 54.220 | 16.210 | 1.00 | 21.12 | C |
| ATOM | 4054 | N | TYR | B | 106 | 66.007 | 51.077 | 17.633 | 1.00 | 21.54 | N |
| ATOM | 4055 | CA | TYR | B | 106 | 67.147 | 50.213 | 17.864 | 1.00 | 22.19 | C |
| ATOM | 4056 | C | TYR | B | 106 | 67.912 | 49.807 | 16.608 | 1.00 | 22.76 | C |
| ATOM | 4057 | O | TYR | B | 106 | 67.349 | 49.777 | 15.507 | 1.00 | 23.70 | O |
| ATOM | 4058 | CB | TYR | B | 106 | 66.697 | 48.874 | 18.467 | 1.00 | 21.79 | C |
| ATOM | 4059 | CG | TYR | B | 106 | 66.189 | 48.903 | 19.882 | 1.00 | 22.43 | C |
| ATOM | 4060 | CD1 | TYR | B | 106 | 66.923 | 49.526 | 20.903 | 1.00 | 21.17 | C |
| ATOM | 4061 | CD2 | TYR | B | 106 | 64.985 | 48.244 | 20.222 | 1.00 | 22.25 | C |
| ATOM | 4062 | CE1 | TYR | B | 106 | 66.472 | 49.501 | 22.221 | 1.00 | 21.87 | C |
| ATOM | 4063 | CE2 | TYR | B | 106 | 64.533 | 48.192 | 21.543 | 1.00 | 21.48 | C |
| ATOM | 4064 | CZ | TYR | B | 106 | 65.266 | 48.825 | 22.534 | 1.00 | 22.36 | C |
| ATOM | 4065 | OH | TYR | B | 106 | 64.794 | 48.824 | 23.831 | 1.00 | 21.28 | O |
| ATOM | 4066 | N | PRO | B | 107 | 69.210 | 49.474 | 16.767 | 1.00 | 23.28 | N |
| ATOM | 4067 | CA | PRO | B | 107 | 69.987 | 49.016 | 15.618 | 1.00 | 23.89 | C |
| ATOM | 4068 | C | PRO | B | 107 | 69.630 | 47.503 | 15.585 | 1.00 | 24.96 | C |
| ATOM | 4069 | O | PRO | B | 107 | 68.899 | 46.999 | 16.474 | 1.00 | 24.57 | O |
| ATOM | 4070 | CB | PRO | B | 107 | 71.452 | 49.270 | 16.024 | 1.00 | 24.42 | C |
| ATOM | 4071 | CG | PRO | B | 107 | 71.423 | 49.063 | 17.529 | 1.00 | 23.04 | C |
| ATOM | 4072 | CD | PRO | B | 107 | 70.088 | 49.811 | 17.901 | 1.00 | 23.79 | C |
| ATOM | 4073 | N | ASP | B | 108 | 70.172 | 46.783 | 14.592 | 1.00 | 25.20 | N |
| ATOM | 4074 | CA | ASP | B | 108 | 69.858 | 45.387 | 14.350 | 1.00 | 25.57 | C |
| ATOM | 4075 | C | ASP | B | 108 | 70.708 | 44.417 | 15.148 | 1.00 | 26.21 | C |
| ATOM | 4076 | O | ASP | B | 108 | 71.725 | 43.922 | 14.660 | 1.00 | 25.31 | O |
| ATOM | 4077 | CB | ASP | B | 108 | 69.982 | 45.163 | 12.836 | 1.00 | 26.38 | C |
| ATOM | 4078 | CG | ASP | B | 108 | 69.705 | 43.728 | 12.404 | 1.00 | 28.24 | C |
| ATOM | 4079 | OD1 | ASP | B | 108 | 69.202 | 42.888 | 13.204 | 1.00 | 27.17 | O |
| ATOM | 4080 | OD2 | ASP | B | 108 | 70.009 | 43.450 | 11.219 | 1.00 | 27.56 | O |
| ATOM | 4081 | N | GLN | B | 109 | 70.274 | 44.135 | 16.378 | 1.00 | 25.98 | N |
| ATOM | 4082 | CA | GLN | B | 109 | 70.988 | 43.221 | 17.256 | 1.00 | 26.68 | C |
| ATOM | 4083 | C | GLN | B | 109 | 70.011 | 42.456 | 18.157 | 1.00 | 26.17 | C |
| ATOM | 4084 | O | GLN | B | 109 | 70.332 | 42.211 | 19.340 | 1.00 | 25.98 | O |
| ATOM | 4085 | CB | GLN | B | 109 | 71.953 | 43.987 | 18.171 | 1.00 | 28.18 | C |
| ATOM | 4086 | CG | GLN | B | 109 | 73.379 | 44.038 | 17.662 | 1.00 | 32.84 | C |
| ATOM | 4087 | CD | GLN | B | 109 | 74.407 | 44.473 | 18.722 | 1.00 | 33.88 | C |
| ATOM | 4088 | OE1 | GLN | B | 109 | 74.898 | 43.651 | 19.543 | 1.00 | 35.36 | O |

| ATOM | 4089 | NE2 | GLN | B | 109 | 74.734 | 45.761 | 18.713 | 1.00 | 32.22 | N |
| ATOM | 4090 | N   | SER | B | 110 | 68.824 | 42.124 | 17.637 | 1.00 | 24.63 | N |
| ATOM | 4091 | CA  | SER | B | 110 | 67.841 | 41.390 | 18.442 | 1.00 | 24.17 | C |
| ATOM | 4092 | C   | SER | B | 110 | 67.645 | 42.048 | 19.812 | 1.00 | 23.39 | C |
| ATOM | 4093 | O   | SER | B | 110 | 67.673 | 41.379 | 20.857 | 1.00 | 23.38 | O |
| ATOM | 4094 | CB  | SER | B | 110 | 68.288 | 39.917 | 18.606 | 1.00 | 23.74 | C |
| ATOM | 4095 | OG  | SER | B | 110 | 68.204 | 39.270 | 17.335 | 1.00 | 24.33 | O |
| ATOM | 4096 | N   | LEU | B | 111 | 67.404 | 43.352 | 19.797 | 1.00 | 22.87 | N |
| ATOM | 4097 | CA  | LEU | B | 111 | 67.206 | 44.123 | 21.024 | 1.00 | 22.11 | C |
| ATOM | 4098 | C   | LEU | B | 111 | 65.731 | 44.322 | 21.382 | 1.00 | 22.09 | C |
| ATOM | 4099 | O   | LEU | B | 111 | 65.406 | 44.580 | 22.547 | 1.00 | 21.41 | O |
| ATOM | 4100 | CB  | LEU | B | 111 | 67.819 | 45.521 | 20.868 | 1.00 | 23.68 | C |
| ATOM | 4101 | CG  | LEU | B | 111 | 69.343 | 45.601 | 20.789 | 1.00 | 25.49 | C |
| ATOM | 4102 | CD1 | LEU | B | 111 | 69.825 | 47.006 | 20.398 | 1.00 | 25.29 | C |
| ATOM | 4103 | CD2 | LEU | B | 111 | 69.879 | 45.214 | 22.193 | 1.00 | 25.42 | C |
| ATOM | 4104 | N   | TYR | B | 112 | 64.847 | 44.226 | 20.383 | 1.00 | 20.67 | N |
| ATOM | 4105 | CA  | TYR | B | 112 | 63.429 | 44.485 | 20.621 | 1.00 | 21.39 | C |
| ATOM | 4106 | C   | TYR | B | 112 | 62.681 | 43.273 | 21.204 | 1.00 | 20.84 | C |
| ATOM | 4107 | O   | TYR | B | 112 | 63.197 | 42.168 | 21.181 | 1.00 | 21.73 | O |
| ATOM | 4108 | CB  | TYR | B | 112 | 62.774 | 44.997 | 19.310 | 1.00 | 19.95 | C |
| ATOM | 4109 | CG  | TYR | B | 112 | 62.931 | 44.057 | 18.105 | 1.00 | 21.26 | C |
| ATOM | 4110 | CD1 | TYR | B | 112 | 62.079 | 42.951 | 17.947 | 1.00 | 20.54 | C |
| ATOM | 4111 | CD2 | TYR | B | 112 | 63.916 | 44.286 | 17.118 | 1.00 | 19.93 | C |
| ATOM | 4112 | CE1 | TYR | B | 112 | 62.185 | 42.077 | 16.830 | 1.00 | 20.59 | C |
| ATOM | 4113 | CE2 | TYR | B | 112 | 64.038 | 43.426 | 15.987 | 1.00 | 21.63 | C |
| ATOM | 4114 | CZ  | TYR | B | 112 | 63.155 | 42.323 | 15.864 | 1.00 | 21.52 | C |
| ATOM | 4115 | OH  | TYR | B | 112 | 63.235 | 41.443 | 14.804 | 1.00 | 22.86 | O |
| ATOM | 4116 | N   | PRO | B | 113 | 61.472 | 43.486 | 21.778 | 1.00 | 20.61 | N |
| ATOM | 4117 | CA  | PRO | B | 113 | 60.719 | 42.354 | 22.336 | 1.00 | 20.34 | C |
| ATOM | 4118 | C   | PRO | B | 113 | 60.444 | 41.344 | 21.229 | 1.00 | 19.97 | C |
| ATOM | 4119 | O   | PRO | B | 113 | 60.052 | 41.716 | 20.110 | 1.00 | 20.50 | O |
| ATOM | 4120 | CB  | PRO | B | 113 | 59.434 | 43.008 | 22.865 | 1.00 | 20.45 | C |
| ATOM | 4121 | CG  | PRO | B | 113 | 59.931 | 44.396 | 23.322 | 1.00 | 20.71 | C |
| ATOM | 4122 | CD  | PRO | B | 113 | 60.826 | 44.767 | 22.106 | 1.00 | 20.05 | C |
| ATOM | 4123 | N   | ALA | B | 114 | 60.617 | 40.072 | 21.565 | 1.00 | 20.92 | N |
| ATOM | 4124 | CA  | ALA | B | 114 | 60.472 | 38.960 | 20.616 | 1.00 | 20.51 | C |
| ATOM | 4125 | C   | ALA | B | 114 | 59.131 | 38.787 | 19.914 | 1.00 | 21.30 | C |
| ATOM | 4126 | O   | ALA | B | 114 | 59.077 | 38.096 | 18.891 | 1.00 | 21.60 | O |
| ATOM | 4127 | CB  | ALA | B | 114 | 60.882 | 37.636 | 21.301 | 1.00 | 20.73 | C |
| ATOM | 4128 | N   | ASN | B | 115 | 58.042 | 39.355 | 20.454 | 1.00 | 21.04 | N |
| ATOM | 4129 | CA  | ASN | B | 115 | 56.763 | 39.250 | 19.747 | 1.00 | 20.14 | C |
| ATOM | 4130 | C   | ASN | B | 115 | 56.504 | 40.462 | 18.843 | 1.00 | 20.61 | C |
| ATOM | 4131 | O   | ASN | B | 115 | 55.393 | 40.623 | 18.324 | 1.00 | 19.70 | O |
| ATOM | 4132 | CB  | ASN | B | 115 | 55.597 | 39.073 | 20.732 | 1.00 | 20.64 | C |
| ATOM | 4133 | CG  | ASN | B | 115 | 55.514 | 40.211 | 21.774 | 1.00 | 21.77 | C |
| ATOM | 4134 | OD1 | ASN | B | 115 | 56.526 | 40.825 | 22.135 | 1.00 | 21.13 | O |
| ATOM | 4135 | ND2 | ASN | B | 115 | 54.307 | 40.459 | 22.288 | 1.00 | 20.88 | N |
| ATOM | 4136 | N   | SER | B | 116 | 57.520 | 41.317 | 18.621 | 1.00 | 20.25 | N |
| ATOM | 4137 | CA  | SER | B | 116 | 57.310 | 42.498 | 17.771 | 1.00 | 19.43 | C |
| ATOM | 4138 | C   | SER | B | 116 | 57.020 | 42.192 | 16.294 | 1.00 | 19.85 | C |
| ATOM | 4139 | O   | SER | B | 116 | 56.143 | 42.800 | 15.706 | 1.00 | 19.27 | O |
| ATOM | 4140 | CB  | SER | B | 116 | 58.534 | 43.441 | 17.792 | 1.00 | 19.48 | C |
| ATOM | 4141 | OG  | SER | B | 116 | 58.807 | 43.941 | 19.087 | 1.00 | 19.99 | O |
| ATOM | 4142 | N   | VAL | B | 117 | 57.795 | 41.304 | 15.672 | 1.00 | 20.00 | N |
| ATOM | 4143 | CA  | VAL | B | 117 | 57.554 | 41.022 | 14.259 | 1.00 | 19.69 | C |
| ATOM | 4144 | C   | VAL | B | 117 | 56.154 | 40.371 | 14.099 | 1.00 | 19.39 | C |
| ATOM | 4145 | O   | VAL | B | 117 | 55.383 | 40.763 | 13.200 | 1.00 | 19.60 | O |
| ATOM | 4146 | CB  | VAL | B | 117 | 58.711 | 40.203 | 13.639 | 1.00 | 19.15 | C |
| ATOM | 4147 | CG1 | VAL | B | 117 | 58.321 | 39.716 | 12.272 | 1.00 | 18.57 | C |
| ATOM | 4148 | CG2 | VAL | B | 117 | 59.951 | 41.112 | 13.492 | 1.00 | 19.62 | C |
| ATOM | 4149 | N   | PRO | B | 118 | 55.796 | 39.394 | 14.954 | 1.00 | 19.32 | N |
| ATOM | 4150 | CA  | PRO | B | 118 | 54.445 | 38.796 | 14.836 | 1.00 | 19.93 | C |
| ATOM | 4151 | C   | PRO | B | 118 | 53.365 | 39.898 | 14.888 | 1.00 | 20.79 | C |
| ATOM | 4152 | O   | PRO | B | 118 | 52.383 | 39.846 | 14.156 | 1.00 | 20.99 | O |
| ATOM | 4153 | CB  | PRO | B | 118 | 54.339 | 37.894 | 16.071 | 1.00 | 19.21 | C |
| ATOM | 4154 | CG  | PRO | B | 118 | 55.787 | 37.362 | 16.168 | 1.00 | 19.49 | C |
| ATOM | 4155 | CD  | PRO | B | 118 | 56.666 | 38.571 | 15.818 | 1.00 | 19.22 | C |
| ATOM | 4156 | N   | GLN | B | 119 | 53.515 | 40.896 | 15.767 | 1.00 | 21.81 | N |
| ATOM | 4157 | CA  | GLN | B | 119 | 52.484 | 41.957 | 15.806 | 1.00 | 21.64 | C |
| ATOM | 4158 | C   | GLN | B | 119 | 52.385 | 42.710 | 14.475 | 1.00 | 20.60 | C |
| ATOM | 4159 | O   | GLN | B | 119 | 51.305 | 43.058 | 14.026 | 1.00 | 19.64 | O |
| ATOM | 4160 | CB  | GLN | B | 119 | 52.772 | 42.938 | 16.941 | 1.00 | 23.53 | C |
| ATOM | 4161 | CG  | GLN | B | 119 | 52.336 | 42.355 | 18.305 | 1.00 | 27.11 | C |
| ATOM | 4162 | CD  | GLN | B | 119 | 50.856 | 42.052 | 18.308 | 1.00 | 29.60 | C |
| ATOM | 4163 | OE1 | GLN | B | 119 | 50.410 | 40.904 | 18.024 | 1.00 | 31.08 | O |
| ATOM | 4164 | NE2 | GLN | B | 119 | 50.061 | 43.084 | 18.586 | 1.00 | 30.37 | N |
| ATOM | 4165 | N   | VAL | B | 120 | 53.521 | 42.969 | 13.838 | 1.00 | 20.48 | N |
| ATOM | 4166 | CA  | VAL | B | 120 | 53.511 | 43.687 | 12.562 | 1.00 | 19.58 | C |
| ATOM | 4167 | C   | VAL | B | 120 | 52.936 | 42.773 | 11.445 | 1.00 | 20.25 | C |
| ATOM | 4168 | O   | VAL | B | 120 | 52.275 | 43.255 | 10.510 | 1.00 | 19.15 | O |

| ATOM | 4169 | CB | VAL | B | 120 | 54.938 | 44.174 | 12.202 | 1.00 | 19.99 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4170 | CG1 | VAL | B | 120 | 54.932 | 44.835 | 10.789 | 1.00 | 19.86 | C |
| ATOM | 4171 | CG2 | VAL | B | 120 | 55.400 | 45.237 | 13.268 | 1.00 | 20.51 | C |
| ATOM | 4172 | N | VAL | B | 121 | 53.171 | 41.466 | 11.551 | 1.00 | 19.62 | N |
| ATOM | 4173 | CA | VAL | B | 121 | 52.584 | 40.522 | 10.578 | 1.00 | 20.06 | C |
| ATOM | 4174 | C | VAL | B | 121 | 51.068 | 40.615 | 10.677 | 1.00 | 19.88 | C |
| ATOM | 4175 | O | VAL | B | 121 | 50.351 | 40.705 | 9.661 | 1.00 | 20.45 | O |
| ATOM | 4176 | CB | VAL | B | 121 | 52.972 | 39.043 | 10.893 | 1.00 | 19.45 | C |
| ATOM | 4177 | CG1 | VAL | B | 121 | 52.158 | 38.072 | 9.993 | 1.00 | 20.72 | C |
| ATOM | 4178 | CG2 | VAL | B | 121 | 54.469 | 38.845 | 10.622 | 1.00 | 18.72 | C |
| ATOM | 4179 | N | ARG | B | 122 | 50.568 | 40.605 | 11.909 | 1.00 | 20.22 | N |
| ATOM | 4180 | CA | ARG | B | 122 | 49.111 | 40.668 | 12.091 | 1.00 | 20.49 | C |
| ATOM | 4181 | C | ARG | B | 122 | 48.556 | 42.003 | 11.568 | 1.00 | 20.75 | C |
| ATOM | 4182 | O | ARG | B | 122 | 47.454 | 42.049 | 10.964 | 1.00 | 20.30 | O |
| ATOM | 4183 | CB | ARG | B | 122 | 48.748 | 40.484 | 13.573 | 1.00 | 19.66 | C |
| ATOM | 4184 | CG | ARG | B | 122 | 47.255 | 40.580 | 13.879 | 1.00 | 19.98 | C |
| ATOM | 4185 | CD | ARG | B | 122 | 46.519 | 39.374 | 13.346 | 1.00 | 19.71 | C |
| ATOM | 4186 | NE | ARG | B | 122 | 45.889 | 39.660 | 12.056 | 1.00 | 21.90 | N |
| ATOM | 4187 | CZ | ARG | B | 122 | 45.057 | 38.823 | 11.428 | 1.00 | 21.81 | C |
| ATOM | 4188 | NH1 | ARG | B | 122 | 44.784 | 37.636 | 11.973 | 1.00 | 21.57 | N |
| ATOM | 4189 | NH2 | ARG | B | 122 | 44.421 | 39.207 | 10.312 | 1.00 | 22.04 | N |
| ATOM | 4190 | N | ARG | B | 123 | 49.298 | 43.081 | 11.829 | 1.00 | 20.22 | N |
| ATOM | 4191 | CA | ARG | B | 123 | 48.908 | 44.430 | 11.344 | 1.00 | 20.05 | C |
| ATOM | 4192 | C | ARG | B | 123 | 48.846 | 44.455 | 9.796 | 1.00 | 19.86 | C |
| ATOM | 4193 | O | ARG | B | 123 | 47.872 | 44.940 | 9.195 | 1.00 | 19.05 | O |
| ATOM | 4194 | CB | ARG | B | 123 | 49.934 | 45.481 | 11.842 | 1.00 | 19.91 | C |
| ATOM | 4195 | CG | ARG | B | 123 | 49.880 | 46.834 | 11.078 | 1.00 | 20.51 | C |
| ATOM | 4196 | CD | ARG | B | 123 | 48.511 | 47.486 | 11.267 | 1.00 | 20.24 | C |
| ATOM | 4197 | NE | ARG | B | 123 | 48.321 | 48.647 | 10.382 | 1.00 | 20.67 | N |
| ATOM | 4198 | CZ | ARG | B | 123 | 47.186 | 48.945 | 9.768 | 1.00 | 19.93 | C |
| ATOM | 4199 | NH1 | ARG | B | 123 | 46.098 | 48.184 | 9.947 | 1.00 | 19.90 | N |
| ATOM | 4200 | NH2 | ARG | B | 123 | 47.158 | 49.967 | 8.897 | 1.00 | 19.77 | N |
| ATOM | 4201 | N | ILE | B | 124 | 49.903 | 43.962 | 9.146 | 1.00 | 19.57 | N |
| ATOM | 4202 | CA | ILE | B | 124 | 49.907 | 43.945 | 7.679 | 1.00 | 20.80 | C |
| ATOM | 4203 | C | ILE | B | 124 | 48.716 | 43.124 | 7.136 | 1.00 | 20.78 | C |
| ATOM | 4204 | O | ILE | B | 124 | 47.977 | 43.580 | 6.265 | 1.00 | 20.64 | O |
| ATOM | 4205 | CB | ILE | B | 124 | 51.275 | 43.429 | 7.172 | 1.00 | 21.25 | C |
| ATOM | 4206 | CG1 | ILE | B | 124 | 52.326 | 44.532 | 7.417 | 1.00 | 21.31 | C |
| ATOM | 4207 | CG2 | ILE | B | 124 | 51.198 | 43.111 | 5.670 | 1.00 | 21.45 | C |
| ATOM | 4208 | CD1 | ILE | B | 124 | 53.775 | 44.107 | 7.183 | 1.00 | 21.46 | C |
| ATOM | 4209 | N | ASN | B | 125 | 48.488 | 41.933 | 7.689 | 1.00 | 20.88 | N |
| ATOM | 4210 | CA | ASN | B | 125 | 47.332 | 41.163 | 7.238 | 1.00 | 20.69 | C |
| ATOM | 4211 | C | ASN | B | 125 | 46.051 | 41.971 | 7.459 | 1.00 | 21.67 | C |
| ATOM | 4212 | O | ASN | B | 125 | 45.193 | 42.022 | 6.557 | 1.00 | 21.46 | O |
| ATOM | 4213 | CB | ASN | B | 125 | 47.261 | 39.822 | 7.967 | 1.00 | 19.94 | C |
| ATOM | 4214 | CG | ASN | B | 125 | 48.043 | 38.760 | 7.244 | 1.00 | 19.33 | C |
| ATOM | 4215 | OD1 | ASN | B | 125 | 48.140 | 38.803 | 6.035 | 1.00 | 20.21 | O |
| ATOM | 4216 | ND2 | ASN | B | 125 | 48.586 | 37.814 | 7.959 | 1.00 | 19.58 | N |
| ATOM | 4217 | N | ASN | B | 126 | 45.913 | 42.622 | 8.625 | 1.00 | 20.88 | N |
| ATOM | 4218 | CA | ASN | B | 126 | 44.701 | 43.411 | 8.872 | 1.00 | 21.52 | C |
| ATOM | 4219 | C | ASN | B | 126 | 44.497 | 44.524 | 7.832 | 1.00 | 21.79 | C |
| ATOM | 4220 | O | ASN | B | 126 | 43.358 | 44.794 | 7.423 | 1.00 | 21.87 | O |
| ATOM | 4221 | CB | ASN | B | 126 | 44.690 | 44.081 | 10.266 | 1.00 | 21.40 | C |
| ATOM | 4222 | CG | ASN | B | 126 | 44.586 | 43.086 | 11.410 | 1.00 | 22.02 | C |
| ATOM | 4223 | OD1 | ASN | B | 126 | 44.046 | 41.974 | 11.258 | 1.00 | 20.86 | O |
| ATOM | 4224 | ND2 | ASN | B | 126 | 45.111 | 43.489 | 12.587 | 1.00 | 22.25 | N |
| ATOM | 4225 | N | ALA | B | 127 | 45.589 | 45.173 | 7.440 | 1.00 | 20.91 | N |
| ATOM | 4226 | CA | ALA | B | 127 | 45.553 | 46.271 | 6.463 | 1.00 | 21.32 | C |
| ATOM | 4227 | C | ALA | B | 127 | 45.183 | 45.740 | 5.070 | 1.00 | 21.23 | C |
| ATOM | 4228 | O | ALA | B | 127 | 44.402 | 46.379 | 4.334 | 1.00 | 20.09 | O |
| ATOM | 4229 | CB | ALA | B | 127 | 46.954 | 46.992 | 6.437 | 1.00 | 20.83 | C |
| ATOM | 4230 | N | LEU | B | 128 | 45.730 | 44.564 | 4.733 | 1.00 | 20.75 | N |
| ATOM | 4231 | CA | LEU | B | 128 | 45.437 | 43.947 | 3.439 | 1.00 | 21.57 | C |
| ATOM | 4232 | C | LEU | B | 128 | 43.982 | 43.501 | 3.459 | 1.00 | 22.00 | C |
| ATOM | 4233 | O | LEU | B | 128 | 43.287 | 43.622 | 2.450 | 1.00 | 22.05 | O |
| ATOM | 4234 | CB | LEU | B | 128 | 46.373 | 42.737 | 3.167 | 1.00 | 20.22 | C |
| ATOM | 4235 | CG | LEU | B | 128 | 47.854 | 43.136 | 2.950 | 1.00 | 20.55 | C |
| ATOM | 4236 | CD1 | LEU | B | 128 | 48.732 | 41.926 | 2.835 | 1.00 | 21.13 | C |
| ATOM | 4237 | CD2 | LEU | B | 128 | 47.991 | 44.011 | 1.710 | 1.00 | 19.50 | C |
| ATOM | 4238 | N | GLN | B | 129 | 43.515 | 42.968 | 4.592 | 1.00 | 22.52 | N |
| ATOM | 4239 | CA | GLN | B | 129 | 42.094 | 42.585 | 4.665 | 1.00 | 23.77 | C |
| ATOM | 4240 | C | GLN | B | 129 | 41.156 | 43.798 | 4.475 | 1.00 | 24.00 | C |
| ATOM | 4241 | O | GLN | B | 129 | 40.080 | 43.678 | 3.877 | 1.00 | 23.62 | O |
| ATOM | 4242 | CB | GLN | B | 129 | 41.762 | 41.918 | 5.994 | 1.00 | 23.49 | C |
| ATOM | 4243 | CG | GLN | B | 129 | 42.354 | 40.511 | 6.100 | 1.00 | 24.05 | C |
| ATOM | 4244 | CD | GLN | B | 129 | 42.174 | 39.914 | 7.477 | 1.00 | 25.41 | C |
| ATOM | 4245 | OE1 | GLN | B | 129 | 42.741 | 40.395 | 8.455 | 1.00 | 26.64 | O |
| ATOM | 4246 | NE2 | GLN | B | 129 | 41.373 | 38.873 | 7.565 | 1.00 | 25.09 | N |
| ATOM | 4247 | N | ARG | B | 130 | 41.555 | 44.963 | 4.967 | 1.00 | 23.31 | N |
| ATOM | 4248 | CA | ARG | B | 130 | 40.680 | 46.128 | 4.821 | 1.00 | 24.05 | C |

| ATOM | 4249 | C | ARG | B | 130 | 40.643 | 46.533 | 3.342 | 1.00 | 24.71 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4250 | O | ARG | B | 130 | 39.587 | 46.834 | 2.793 | 1.00 | 24.57 | O |
| ATOM | 4251 | CB | ARG | B | 130 | 41.178 | 47.302 | 5.681 | 1.00 | 23.39 | C |
| ATOM | 4252 | CG | ARG | B | 130 | 40.205 | 48.478 | 5.655 | 1.00 | 24.24 | C |
| ATOM | 4253 | CD | ARG | B | 130 | 38.954 | 48.105 | 6.453 | 1.00 | 23.73 | C |
| ATOM | 4254 | NE | ARG | B | 130 | 39.212 | 48.220 | 7.890 | 1.00 | 23.03 | N |
| ATOM | 4255 | CZ | ARG | B | 130 | 38.642 | 47.468 | 8.836 | 1.00 | 23.65 | C |
| ATOM | 4256 | NH1 | ARG | B | 130 | 37.791 | 46.490 | 8.494 | 1.00 | 21.56 | N |
| ATOM | 4257 | NH2 | ARG | B | 130 | 38.834 | 47.773 | 10.145 | 1.00 | 21.17 | N |
| ATOM | 4258 | N | ALA | B | 131 | 41.804 | 46.516 | 2.691 | 1.00 | 25.00 | N |
| ATOM | 4259 | CA | ALA | B | 131 | 41.874 | 46.857 | 1.266 | 1.00 | 25.59 | C |
| ATOM | 4260 | C | ALA | B | 131 | 40.969 | 45.893 | 0.489 | 1.00 | 25.89 | C |
| ATOM | 4261 | O | ALA | B | 131 | 40.216 | 46.312 | -0.399 | 1.00 | 26.30 | O |
| ATOM | 4262 | CB | ALA | B | 131 | 43.327 | 46.734 | 0.763 | 1.00 | 25.23 | C |
| ATOM | 4263 | N | ASP | B | 132 | 41.054 | 44.615 | 0.842 | 1.00 | 26.36 | N |
| ATOM | 4264 | CA | ASP | B | 132 | 40.246 | 43.541 | 0.237 | 1.00 | 26.88 | C |
| ATOM | 4265 | C | ASP | B | 132 | 38.721 | 43.812 | 0.431 | 1.00 | 26.91 | C |
| ATOM | 4266 | O | ASP | B | 132 | 37.901 | 43.716 | -0.527 | 1.00 | 25.87 | O |
| ATOM | 4267 | CB | ASP | B | 132 | 40.653 | 42.190 | 0.862 | 1.00 | 27.11 | C |
| ATOM | 4268 | CG | ASP | B | 132 | 39.836 | 41.009 | 0.307 | 1.00 | 28.76 | C |
| ATOM | 4269 | OD1 | ASP | B | 132 | 39.836 | 40.813 | -0.932 | 1.00 | 28.45 | O |
| ATOM | 4270 | OD2 | ASP | B | 132 | 39.205 | 40.293 | 1.111 | 1.00 | 28.19 | O |
| ATOM | 4271 | N | GLN | B | 133 | 38.353 | 44.175 | 1.660 | 1.00 | 25.75 | N |
| ATOM | 4272 | CA | GLN | B | 133 | 36.963 | 44.483 | 1.988 | 1.00 | 25.61 | C |
| ATOM | 4273 | C | GLN | B | 133 | 36.501 | 45.671 | 1.167 | 1.00 | 25.51 | C |
| ATOM | 4274 | O | GLN | B | 133 | 35.425 | 45.635 | 0.580 | 1.00 | 25.66 | O |
| ATOM | 4275 | CB | GLN | B | 133 | 36.817 | 44.811 | 3.497 | 1.00 | 25.41 | C |
| ATOM | 4276 | CG | GLN | B | 133 | 37.040 | 43.595 | 4.376 | 1.00 | 24.65 | C |
| ATOM | 4277 | CD | GLN | B | 133 | 37.579 | 43.919 | 5.757 | 1.00 | 25.57 | C |
| ATOM | 4278 | OE1 | GLN | B | 133 | 37.874 | 42.994 | 6.561 | 1.00 | 26.51 | O |
| ATOM | 4279 | NE2 | GLN | B | 133 | 37.716 | 45.199 | 6.059 | 1.00 | 23.23 | N |
| ATOM | 4280 | N | ILE | B | 134 | 37.301 | 46.727 | 1.135 | 1.00 | 25.10 | N |
| ATOM | 4281 | CA | ILE | B | 134 | 36.945 | 47.920 | 0.366 | 1.00 | 25.99 | C |
| ATOM | 4282 | C | ILE | B | 134 | 36.802 | 47.585 | -1.137 | 1.00 | 27.15 | C |
| ATOM | 4283 | O | ILE | B | 134 | 35.835 | 47.995 | -1.801 | 1.00 | 27.45 | O |
| ATOM | 4284 | CB | ILE | B | 134 | 38.019 | 49.004 | 0.556 | 1.00 | 25.61 | C |
| ATOM | 4285 | CG1 | ILE | B | 134 | 38.031 | 49.430 | 2.046 | 1.00 | 25.40 | C |
| ATOM | 4286 | CG2 | ILE | B | 134 | 37.745 | 50.200 | -0.355 | 1.00 | 23.98 | C |
| ATOM | 4287 | CD1 | ILE | B | 134 | 39.288 | 50.224 | 2.417 | 1.00 | 24.83 | C |
| ATOM | 4288 | N | ALA | B | 135 | 37.764 | 46.852 | -1.676 | 1.00 | 27.54 | N |
| ATOM | 4289 | CA | ALA | B | 135 | 37.709 | 46.477 | -3.094 | 1.00 | 28.84 | C |
| ATOM | 4290 | C | ALA | B | 135 | 36.389 | 45.748 | -3.411 | 1.00 | 29.48 | C |
| ATOM | 4291 | O | ALA | B | 135 | 35.744 | 46.021 | -4.433 | 1.00 | 29.48 | O |
| ATOM | 4292 | CB | ALA | B | 135 | 38.925 | 45.566 | -3.448 | 1.00 | 27.06 | C |
| ATOM | 4293 | N | LYS | B | 136 | 35.985 | 44.842 | -2.530 | 1.00 | 30.05 | N |
| ATOM | 4294 | CA | LYS | B | 136 | 34.763 | 44.090 | -2.746 | 1.00 | 31.70 | C |
| ATOM | 4295 | C | LYS | B | 136 | 33.527 | 44.990 | -2.769 | 1.00 | 32.80 | C |
| ATOM | 4296 | O | LYS | B | 136 | 32.724 | 44.897 | -3.690 | 1.00 | 32.64 | O |
| ATOM | 4297 | CB | LYS | B | 136 | 34.573 | 42.992 | -1.685 | 1.00 | 31.82 | C |
| ATOM | 4298 | CG | LYS | B | 136 | 33.384 | 42.046 | -1.991 | 1.00 | 33.43 | C |
| ATOM | 4299 | CD | LYS | B | 136 | 33.128 | 41.033 | -0.868 | 1.00 | 34.05 | C |
| ATOM | 4300 | CE | LYS | B | 136 | 32.340 | 39.785 | -1.339 | 1.00 | 34.66 | C |
| ATOM | 4301 | NZ | LYS | B | 136 | 32.353 | 38.698 | -0.284 | 1.00 | 33.28 | N |
| ATOM | 4302 | N | ILE | B | 137 | 33.352 | 45.860 | -1.778 | 1.00 | 32.73 | N |
| ATOM | 4303 | CA | ILE | B | 137 | 32.162 | 46.695 | -1.819 | 1.00 | 33.31 | C |
| ATOM | 4304 | C | ILE | B | 137 | 32.236 | 47.724 | -2.953 | 1.00 | 34.40 | C |
| ATOM | 4305 | O | ILE | B | 137 | 31.215 | 48.214 | -3.387 | 1.00 | 34.55 | O |
| ATOM | 4306 | CB | ILE | B | 137 | 31.901 | 47.427 | -0.476 | 1.00 | 32.42 | C |
| ATOM | 4307 | CG1 | ILE | B | 137 | 32.942 | 48.523 | -0.259 | 1.00 | 31.98 | C |
| ATOM | 4308 | CG2 | ILE | B | 137 | 31.835 | 46.406 | 0.653 | 1.00 | 31.46 | C |
| ATOM | 4309 | CD1 | ILE | B | 137 | 32.570 | 49.531 | 0.846 | 1.00 | 31.57 | C |
| ATOM | 4310 | N | GLU | B | 138 | 33.434 | 48.053 | -3.426 | 1.00 | 35.56 | N |
| ATOM | 4311 | CA | GLU | B | 138 | 33.592 | 48.999 | -4.545 | 1.00 | 37.18 | C |
| ATOM | 4312 | C | GLU | B | 138 | 33.536 | 48.291 | -5.921 | 1.00 | 37.38 | C |
| ATOM | 4313 | O | GLU | B | 138 | 33.560 | 48.964 | -6.950 | 1.00 | 36.56 | O |
| ATOM | 4314 | CB | GLU | B | 138 | 34.941 | 49.719 | -4.465 | 1.00 | 39.32 | C |
| ATOM | 4315 | CG | GLU | B | 138 | 35.090 | 50.640 | -3.276 | 1.00 | 43.02 | C |
| ATOM | 4316 | CD | GLU | B | 138 | 34.175 | 51.837 | -3.378 | 1.00 | 45.64 | C |
| ATOM | 4317 | OE1 | GLU | B | 138 | 34.476 | 52.723 | -4.220 | 1.00 | 47.61 | O |
| ATOM | 4318 | OE2 | GLU | B | 138 | 33.157 | 51.894 | -2.632 | 1.00 | 46.74 | O |
| ATOM | 4319 | N | GLY | B | 139 | 33.485 | 46.957 | -5.931 | 1.00 | 36.51 | N |
| ATOM | 4320 | CA | GLY | B | 139 | 33.480 | 46.230 | -7.186 | 1.00 | 36.39 | C |
| ATOM | 4321 | C | GLY | B | 139 | 34.817 | 46.384 | -7.912 | 1.00 | 36.66 | C |
| ATOM | 4322 | O | GLY | B | 139 | 34.891 | 46.302 | -9.152 | 1.00 | 36.71 | O |
| ATOM | 4323 | N | ASP | B | 140 | 35.886 | 46.611 | -7.155 | 1.00 | 35.86 | N |
| ATOM | 4324 | CA | ASP | B | 140 | 37.217 | 46.782 | -7.739 | 1.00 | 35.58 | C |
| ATOM | 4325 | C | ASP | B | 140 | 37.895 | 45.420 | -7.872 | 1.00 | 35.45 | C |
| ATOM | 4326 | O | ASP | B | 140 | 38.210 | 44.764 | -6.869 | 1.00 | 34.65 | O |
| ATOM | 4327 | CB | ASP | B | 140 | 38.065 | 47.714 | -6.851 | 1.00 | 35.51 | C |
| ATOM | 4328 | CG | ASP | B | 140 | 39.489 | 47.916 | -7.389 | 1.00 | 36.32 | C |

| ATOM | 4329 | OD1 | ASP | B | 140 | 39.811 | 47.372 | -8.467 | 1.00 | 35.04 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4330 | OD2 | ASP | B | 140 | 40.279 | 48.633 | -6.732 | 1.00 | 36.51 | O |
| ATOM | 4331 | N | THR | B | 141 | 38.117 | 44.973 | -9.104 | 1.00 | 35.57 | N |
| ATOM | 4332 | CA | THR | B | 141 | 38.770 | 43.679 | -9.289 | 1.00 | 35.82 | C |
| ATOM | 4333 | C | THR | B | 141 | 40.156 | 43.873 | -9.887 | 1.00 | 36.06 | C |
| ATOM | 4334 | O | THR | B | 141 | 40.766 | 42.928 | -10.361 | 1.00 | 36.58 | O |
| ATOM | 4335 | CB | THR | B | 141 | 37.952 | 42.733 | -10.219 | 1.00 | 36.97 | C |
| ATOM | 4336 | OG1 | THR | B | 141 | 37.851 | 43.322 | -11.522 | 1.00 | 36.62 | O |
| ATOM | 4337 | CG2 | THR | B | 141 | 36.536 | 42.510 | -9.657 | 1.00 | 37.06 | C |
| ATOM | 4338 | N | SER | B | 142 | 40.670 | 45.095 | -9.842 | 1.00 | 35.87 | N |
| ATOM | 4339 | CA | SER | B | 142 | 41.996 | 45.354 | -10.390 | 1.00 | 35.57 | C |
| ATOM | 4340 | C | SER | B | 142 | 43.120 | 44.548 | -9.703 | 1.00 | 35.28 | C |
| ATOM | 4341 | O | SER | B | 142 | 44.136 | 44.257 | -10.314 | 1.00 | 34.84 | O |
| ATOM | 4342 | CB | SER | B | 142 | 42.302 | 46.863 | -10.325 | 1.00 | 36.26 | C |
| ATOM | 4343 | OG | SER | B | 142 | 42.224 | 47.344 | -9.003 | 1.00 | 36.48 | O |
| ATOM | 4344 | N | VAL | B | 143 | 42.954 | 44.181 | -8.437 | 1.00 | 34.01 | N |
| ATOM | 4345 | CA | VAL | B | 143 | 43.991 | 43.393 | -7.763 | 1.00 | 33.12 | C |
| ATOM | 4346 | C | VAL | B | 143 | 43.390 | 42.024 | -7.517 | 1.00 | 33.44 | C |
| ATOM | 4347 | O | VAL | B | 143 | 42.355 | 41.914 | -6.853 | 1.00 | 33.18 | O |
| ATOM | 4348 | CB | VAL | B | 143 | 44.425 | 44.083 | -6.417 | 1.00 | 32.54 | C |
| ATOM | 4349 | CG1 | VAL | B | 143 | 45.304 | 43.136 | -5.550 | 1.00 | 30.83 | C |
| ATOM | 4350 | CG2 | VAL | B | 143 | 45.180 | 45.377 | -6.750 | 1.00 | 32.52 | C |
| ATOM | 4351 | N | GLU | B | 144 | 44.028 | 40.984 | -8.053 | 1.00 | 33.96 | N |
| ATOM | 4352 | CA | GLU | B | 144 | 43.528 | 39.614 | -7.915 | 1.00 | 34.86 | C |
| ATOM | 4353 | C | GLU | B | 144 | 43.658 | 39.083 | -6.504 | 1.00 | 32.96 | C |
| ATOM | 4354 | O | GLU | B | 144 | 42.747 | 38.453 | -6.003 | 1.00 | 33.17 | O |
| ATOM | 4355 | CB | GLU | B | 144 | 44.284 | 38.629 | -8.812 | 1.00 | 37.75 | C |
| ATOM | 4356 | CG | GLU | B | 144 | 44.632 | 39.128 | -10.179 | 1.00 | 44.03 | C |
| ATOM | 4357 | CD | GLU | B | 144 | 46.089 | 39.697 | -10.276 | 1.00 | 46.94 | C |
| ATOM | 4358 | OE1 | GLU | B | 144 | 46.414 | 40.707 | -9.568 | 1.00 | 47.42 | O |
| ATOM | 4359 | OE2 | GLU | B | 144 | 46.887 | 39.117 | -11.080 | 1.00 | 48.43 | O |
| ATOM | 4360 | N | ASN | B | 145 | 44.796 | 39.321 | -5.868 | 1.00 | 30.99 | N |
| ATOM | 4361 | CA | ASN | B | 145 | 44.987 | 38.815 | -4.502 | 1.00 | 29.52 | C |
| ATOM | 4362 | C | ASN | B | 145 | 45.530 | 39.903 | -3.562 | 1.00 | 28.36 | C |
| ATOM | 4363 | O | ASN | B | 145 | 46.713 | 40.242 | -3.620 | 1.00 | 28.55 | O |
| ATOM | 4364 | CB | ASN | B | 145 | 45.970 | 37.633 | -4.509 | 1.00 | 28.45 | C |
| ATOM | 4365 | CG | ASN | B | 145 | 46.172 | 37.025 | -3.117 | 1.00 | 28.56 | C |
| ATOM | 4366 | OD1 | ASN | B | 145 | 47.268 | 36.562 | -2.782 | 1.00 | 29.02 | O |
| ATOM | 4367 | ND2 | ASN | B | 145 | 45.128 | 37.032 | -2.308 | 1.00 | 26.76 | N |
| ATOM | 4368 | N | TRP | B | 146 | 44.665 | 40.431 | -2.708 | 1.00 | 27.21 | N |
| ATOM | 4369 | CA | TRP | B | 146 | 45.059 | 41.456 | -1.755 | 1.00 | 26.21 | C |
| ATOM | 4370 | C | TRP | B | 146 | 45.888 | 40.817 | -0.654 | 1.00 | 26.09 | C |
| ATOM | 4371 | O | TRP | B | 146 | 46.816 | 41.434 | -0.124 | 1.00 | 26.64 | O |
| ATOM | 4372 | CB | TRP | B | 146 | 43.818 | 42.135 | -1.157 | 1.00 | 25.36 | C |
| ATOM | 4373 | CG | TRP | B | 146 | 43.335 | 43.251 | -2.007 | 1.00 | 24.54 | C |
| ATOM | 4374 | CD1 | TRP | B | 146 | 42.231 | 43.262 | -2.809 | 1.00 | 25.14 | C |
| ATOM | 4375 | CD2 | TRP | B | 146 | 44.007 | 44.497 | -2.223 | 1.00 | 25.12 | C |
| ATOM | 4376 | NE1 | TRP | B | 146 | 42.170 | 44.445 | -3.524 | 1.00 | 25.12 | N |
| ATOM | 4377 | CE2 | TRP | B | 146 | 43.252 | 45.221 | -3.180 | 1.00 | 25.30 | C |
| ATOM | 4378 | CE3 | TRP | B | 146 | 45.177 | 45.075 | -1.696 | 1.00 | 24.59 | C |
| ATOM | 4379 | CZ2 | TRP | B | 146 | 43.625 | 46.494 | -3.622 | 1.00 | 25.86 | C |
| ATOM | 4380 | CZ3 | TRP | B | 146 | 45.550 | 46.355 | -2.141 | 1.00 | 24.76 | C |
| ATOM | 4381 | CH2 | TRP | B | 146 | 44.775 | 47.044 | -3.089 | 1.00 | 25.52 | C |
| ATOM | 4382 | N | LEU | B | 147 | 45.559 | 39.579 | -0.317 | 1.00 | 25.96 | N |
| ATOM | 4383 | CA | LEU | B | 147 | 46.284 | 38.861 | 0.733 | 1.00 | 26.78 | C |
| ATOM | 4384 | C | LEU | B | 147 | 47.574 | 38.217 | 0.233 | 1.00 | 26.04 | C |
| ATOM | 4385 | O | LEU | B | 147 | 47.706 | 37.002 | 0.135 | 1.00 | 25.69 | O |
| ATOM | 4386 | CB | LEU | B | 147 | 45.358 | 37.836 | 1.395 | 1.00 | 27.82 | C |
| ATOM | 4387 | CG | LEU | B | 147 | 44.368 | 38.535 | 2.353 | 1.00 | 28.90 | C |
| ATOM | 4388 | CD1 | LEU | B | 147 | 43.255 | 37.599 | 2.726 | 1.00 | 30.80 | C |
| ATOM | 4389 | CD2 | LEU | B | 147 | 45.115 | 38.921 | 3.636 | 1.00 | 29.36 | C |
| ATOM | 4390 | N | ALA | B | 148 | 48.520 | 39.076 | -0.103 | 1.00 | 25.20 | N |
| ATOM | 4391 | CA | ALA | B | 148 | 49.814 | 38.647 | -0.564 | 1.00 | 24.94 | C |
| ATOM | 4392 | C | ALA | B | 148 | 50.541 | 37.967 | 0.592 | 1.00 | 24.80 | C |
| ATOM | 4393 | O | ALA | B | 148 | 50.452 | 38.412 | 1.766 | 1.00 | 24.77 | O |
| ATOM | 4394 | CB | ALA | B | 148 | 50.607 | 39.847 | -1.030 | 1.00 | 24.93 | C |
| ATOM | 4395 | N | PRO | B | 149 | 51.290 | 36.899 | 0.291 | 1.00 | 24.15 | N |
| ATOM | 4396 | CA | PRO | B | 149 | 52.026 | 36.194 | 1.344 | 1.00 | 24.15 | C |
| ATOM | 4397 | C | PRO | B | 149 | 53.076 | 37.088 | 1.981 | 1.00 | 24.28 | C |
| ATOM | 4398 | O | PRO | B | 149 | 53.721 | 37.913 | 1.297 | 1.00 | 23.65 | O |
| ATOM | 4399 | CB | PRO | B | 149 | 52.650 | 34.987 | 0.618 | 1.00 | 24.34 | C |
| ATOM | 4400 | CG | PRO | B | 149 | 52.749 | 35.475 | -0.824 | 1.00 | 25.81 | C |
| ATOM | 4401 | CD | PRO | B | 149 | 51.457 | 36.246 | -1.022 | 1.00 | 24.72 | C |
| ATOM | 4402 | N | ILE | B | 150 | 53.235 | 36.923 | 3.291 | 1.00 | 23.22 | N |
| ATOM | 4403 | CA | ILE | B | 150 | 54.218 | 37.709 | 4.044 | 1.00 | 22.49 | C |
| ATOM | 4404 | C | ILE | B | 150 | 55.394 | 36.810 | 4.458 | 1.00 | 22.34 | C |
| ATOM | 4405 | O | ILE | B | 150 | 55.188 | 35.737 | 5.030 | 1.00 | 22.81 | O |
| ATOM | 4406 | CB | ILE | B | 150 | 53.566 | 38.323 | 5.337 | 1.00 | 21.99 | C |
| ATOM | 4407 | CG1 | ILE | B | 150 | 52.375 | 39.234 | 4.963 | 1.00 | 21.42 | C |
| ATOM | 4408 | CG2 | ILE | B | 150 | 54.619 | 39.073 | 6.137. | 1.00 | 20.93 | C |

| ATOM | 4409 | CD1 | ILE | B | 150 | 51.441 | 39.595 | 6.190 | 1.00 | 21.27 | C |
|------|------|-----|-----|---|-----|--------|--------|-------|------|-------|---|
| ATOM | 4410 | N | VAL | B | 151 | 56.618 | 37.250 | 4.165 | 1.00 | 22.69 | N |
| ATOM | 4411 | CA | VAL | B | 151 | 57.834 | 36.532 | 4.560 | 1.00 | 22.29 | C |
| ATOM | 4412 | C | VAL | B | 151 | 58.430 | 37.397 | 5.655 | 1.00 | 23.18 | C |
| ATOM | 4413 | O | VAL | B | 151 | 58.755 | 38.570 | 5.422 | 1.00 | 23.41 | O |
| ATOM | 4414 | CB | VAL | B | 151 | 58.819 | 36.381 | 3.368 | 1.00 | 22.53 | C |
| ATOM | 4415 | CG1 | VAL | B | 151 | 60.204 | 35.902 | 3.864 | 1.00 | 22.51 | C |
| ATOM | 4416 | CG2 | VAL | B | 151 | 58.247 | 35.364 | 2.400 | 1.00 | 21.96 | C |
| ATOM | 4417 | N | ALA | B | 152 | 58.545 | 36.830 | 6.858 | 1.00 | 22.60 | N |
| ATOM | 4418 | CA | ALA | B | 152 | 59.031 | 37.589 | 8.000 | 1.00 | 23.27 | C |
| ATOM | 4419 | C | ALA | B | 152 | 60.379 | 37.160 | 8.535 | 1.00 | 23.19 | C |
| ATOM | 4420 | O | ALA | B | 152 | 60.755 | 35.977 | 8.470 | 1.00 | 22.84 | O |
| ATOM | 4421 | CB | ALA | B | 152 | 57.972 | 37.561 | 9.157 | 1.00 | 22.17 | C |
| ATOM | 4422 | N | ASP | B | 153 | 61.069 | 38.157 | 9.075 | 1.00 | 22.44 | N |
| ATOM | 4423 | CA | ASP | B | 153 | 62.407 | 38.043 | 9.662 | 1.00 | 23.14 | C |
| ATOM | 4424 | C | ASP | B | 153 | 62.317 | 37.458 | 11.092 | 1.00 | 23.48 | C |
| ATOM | 4425 | O | ASP | B | 153 | 61.761 | 38.089 | 11.988 | 1.00 | 24.30 | O |
| ATOM | 4426 | CB | ASP | B | 153 | 62.984 | 39.485 | 9.684 | 1.00 | 22.24 | C |
| ATOM | 4427 | CG | ASP | B | 153 | 64.446 | 39.591 | 10.117 | 1.00 | 23.20 | C |
| ATOM | 4428 | OD1 | ASP | B | 153 | 65.035 | 38.700 | 10.755 | 1.00 | 22.19 | O |
| ATOM | 4429 | OD2 | ASP | B | 153 | 65.016 | 40.673 | 9.831 | 1.00 | 23.25 | O |
| ATOM | 4430 | N | GLY | B | 154 | 62.871 | 36.265 | 11.307 | 1.00 | 22.98 | N |
| ATOM | 4431 | CA | GLY | B | 154 | 62.876 | 35.672 | 12.635 | 1.00 | 22.72 | C |
| ATOM | 4432 | C | GLY | B | 154 | 64.225 | 35.831 | 13.375 | 1.00 | 23.25 | C |
| ATOM | 4433 | O | GLY | B | 154 | 64.437 | 35.198 | 14.427 | 1.00 | 22.65 | O |
| ATOM | 4434 | N | GLU | B | 155 | 65.111 | 36.706 | 12.865 | 1.00 | 23.45 | N |
| ATOM | 4435 | CA | GLU | B | 155 | 66.471 | 36.922 | 13.453 | 1.00 | 24.00 | C |
| ATOM | 4436 | C | GLU | B | 155 | 67.034 | 35.505 | 13.697 | 1.00 | 25.01 | C |
| ATOM | 4437 | O | GLU | B | 155 | 66.991 | 34.680 | 12.765 | 1.00 | 25.06 | O |
| ATOM | 4438 | CB | GLU | B | 155 | 66.390 | 37.711 | 14.771 | 1.00 | 23.81 | C |
| ATOM | 4439 | CG | GLU | B | 155 | 65.585 | 39.021 | 14.667 | 1.00 | 25.26 | C |
| ATOM | 4440 | CD | GLU | B | 155 | 66.331 | 40.186 | 13.983 | 1.00 | 26.35 | C |
| ATOM | 4441 | OE1 | GLU | B | 155 | 67.534 | 40.014 | 13.565 | 1.00 | 27.05 | O |
| ATOM | 4442 | OE2 | GLU | B | 155 | 65.711 | 41.280 | 13.865 | 1.00 | 24.57 | O |
| ATOM | 4443 | N | ALA | B | 156 | 67.551 | 35.232 | 14.910 | 1.00 | 25.42 | N |
| ATOM | 4444 | CA | ALA | B | 156 | 68.026 | 33.884 | 15.270 | 1.00 | 25.99 | C |
| ATOM | 4445 | C | ALA | B | 156 | 67.053 | 33.311 | 16.320 | 1.00 | 26.52 | C |
| ATOM | 4446 | O | ALA | B | 156 | 67.408 | 32.419 | 17.079 | 1.00 | 26.68 | O |
| ATOM | 4447 | CB | ALA | B | 156 | 69.480 | 33.928 | 15.863 | 1.00 | 27.22 | C |
| ATOM | 4448 | N | GLY | B | 157 | 65.822 | 33.836 | 16.396 | 1.00 | 26.26 | N |
| ATOM | 4449 | CA | GLY | B | 157 | 64.872 | 33.303 | 17.360 | 1.00 | 25.13 | C |
| ATOM | 4450 | C | GLY | B | 157 | 64.900 | 33.826 | 18.795 | 1.00 | 25.76 | C |
| ATOM | 4451 | O | GLY | B | 157 | 64.178 | 33.296 | 19.639 | 1.00 | 24.98 | O |
| ATOM | 4452 | N | PHE | B | 158 | 65.726 | 34.837 | 19.085 | 1.00 | 24.88 | N |
| ATOM | 4453 | CA | PHE | B | 158 | 65.767 | 35.419 | 20.428 | 1.00 | 24.48 | C |
| ATOM | 4454 | C | PHE | B | 158 | 66.046 | 34.433 | 21.552 | 1.00 | 24.68 | C |
| ATOM | 4455 | O | PHE | B | 158 | 65.427 | 34.485 | 22.618 | 1.00 | 23.51 | O |
| ATOM | 4456 | CB | PHE | B | 158 | 64.438 | 36.165 | 20.719 | 1.00 | 24.92 | C |
| ATOM | 4457 | CG | PHE | B | 158 | 64.167 | 37.312 | 19.766 | 1.00 | 24.61 | C |
| ATOM | 4458 | CD1 | PHE | B | 158 | 63.557 | 37.089 | 18.543 | 1.00 | 25.32 | C |
| ATOM | 4459 | CD2 | PHE | B | 158 | 64.585 | 38.610 | 20.087 | 1.00 | 24.65 | C |
| ATOM | 4460 | CE1 | PHE | B | 158 | 63.362 | 38.142 | 17.623 | 1.00 | 26.52 | C |
| ATOM | 4461 | CE2 | PHE | B | 158 | 64.405 | 39.676 | 19.194 | 1.00 | 24.95 | C |
| ATOM | 4462 | CZ | PHE | B | 158 | 63.799 | 39.457 | 17.955 | 1.00 | 24.83 | C |
| ATOM | 4463 | N | GLY | B | 159 | 66.991 | 33.523 | 21.338 | 1.00 | 25.41 | N |
| ATOM | 4464 | CA | GLY | B | 159 | 67.291 | 32.596 | 22.416 | 1.00 | 25.79 | C |
| ATOM | 4465 | C | GLY | B | 159 | 67.629 | 31.235 | 21.860 | 1.00 | 26.03 | C |
| ATOM | 4466 | O | GLY | B | 159 | 68.357 | 31.143 | 20.860 | 1.00 | 25.16 | O |
| ATOM | 4467 | N | GLY | B | 160 | 67.083 | 30.196 | 22.489 | 1.00 | 25.29 | N |
| ATOM | 4468 | CA | GLY | B | 160 | 67.376 | 28.849 | 22.042 | 1.00 | 25.60 | C |
| ATOM | 4469 | C | GLY | B | 160 | 66.227 | 28.258 | 21.252 | 1.00 | 25.38 | C |
| ATOM | 4470 | O | GLY | B | 160 | 65.380 | 28.978 | 20.730 | 1.00 | 25.57 | O |
| ATOM | 4471 | N | ALA | B | 161 | 66.184 | 26.940 | 21.186 | 1.00 | 25.08 | N |
| ATOM | 4472 | CA | ALA | B | 161 | 65.150 | 26.272 | 20.425 | 1.00 | 25.38 | C |
| ATOM | 4473 | C | ALA | B | 161 | 63.722 | 26.598 | 20.843 | 1.00 | 25.06 | C |
| ATOM | 4474 | O | ALA | B | 161 | 62.827 | 26.650 | 19.983 | 1.00 | 25.36 | O |
| ATOM | 4475 | CB | ALA | B | 161 | 65.372 | 24.742 | 20.465 | 1.00 | 26.15 | C |
| ATOM | 4476 | N | LEU | B | 162 | 63.492 | 26.804 | 22.137 | 1.00 | 24.43 | N |
| ATOM | 4477 | CA | LEU | B | 162 | 62.139 | 27.072 | 22.586 | 1.00 | 24.48 | C |
| ATOM | 4478 | C | LEU | B | 162 | 61.749 | 28.507 | 22.203 | 1.00 | 24.15 | C |
| ATOM | 4479 | O | LEU | B | 162 | 60.594 | 28.761 | 21.899 | 1.00 | 23.50 | O |
| ATOM | 4480 | CB | LEU | B | 162 | 62.026 | 26.847 | 24.105 | 1.00 | 24.83 | C |
| ATOM | 4481 | CG | LEU | B | 162 | 62.402 | 25.425 | 24.562 | 1.00 | 24.95 | C |
| ATOM | 4482 | CD1 | LEU | B | 162 | 62.156 | 25.306 | 26.056 | 1.00 | 25.42 | C |
| ATOM | 4483 | CD2 | LEU | B | 162 | 61.552 | 24.403 | 23.849 | 1.00 | 25.45 | C |
| ATOM | 4484 | N | ASN | B | 163 | 62.716 | 29.424 | 22.200 | 1.00 | 23.79 | N |
| ATOM | 4485 | CA | ASN | B | 163 | 62.419 | 30.809 | 21.794 | 1.00 | 23.90 | C |
| ATOM | 4486 | C | ASN | B | 163 | 62.130 | 30.813 | 20.300 | 1.00 | 23.45 | C |
| ATOM | 4487 | O | ASN | B | 163 | 61.235 | 31.513 | 19.845 | 1.00 | 23.18 | O |
| ATOM | 4488 | CB | ASN | B | 163 | 63.602 | 31.725 | 22.104 | 1.00 | 22.85 | C |

| ATOM | 4489 | CG | ASN | B | 163 | 63.871 | 31.812 | 23.605 | 1.00 | 24.25 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4490 | OD1 | ASN | B | 163 | 63.147 | 32.528 | 24.358 | 1.00 | 24.85 | O |
| ATOM | 4491 | ND2 | ASN | B | 163 | 64.873 | 31.071 | 24.063 | 1.00 | 21.12 | N |
| ATOM | 4492 | N | VAL | B | 164 | 62.867 | 30.012 | 19.522 | 1.00 | 23.97 | N |
| ATOM | 4493 | CA | VAL | B | 164 | 62.587 | 29.979 | 18.087 | 1.00 | 23.21 | C |
| ATOM | 4494 | C | VAL | B | 164 | 61.191 | 29.383 | 17.876 | 1.00 | 22.87 | C |
| ATOM | 4495 | O | VAL | B | 164 | 60.402 | 29.857 | 17.037 | 1.00 | 21.57 | O |
| ATOM | 4496 | CB | VAL | B | 164 | 63.638 | 29.128 | 17.302 | 1.00 | 25.34 | C |
| ATOM | 4497 | CG1 | VAL | B | 164 | 64.999 | 29.775 | 17.355 | 1.00 | 24.00 | C |
| ATOM | 4498 | CG2 | VAL | B | 164 | 63.806 | 27.811 | 17.969 | 1.00 | 28.44 | C |
| ATOM | 4499 | N | TYR | B | 165 | 60.883 | 28.334 | 18.636 | 1.00 | 22.06 | N |
| ATOM | 4500 | CA | TYR | B | 165 | 59.581 | 27.678 | 18.519 | 1.00 | 22.74 | C |
| ATOM | 4501 | C | TYR | B | 165 | 58.427 | 28.676 | 18.758 | 1.00 | 22.56 | C |
| ATOM | 4502 | O | TYR | B | 165 | 57.487 | 28.789 | 17.956 | 1.00 | 21.74 | O. |
| ATOM | 4503 | CB | TYR | B | 165 | 59.481 | 26.535 | 19.541 | 1.00 | 23.20 | C |
| ATOM | 4504 | CG | TYR | B | 165 | 58.185 | 25.744 | 19.413 | 1.00 | 24.84 | C |
| ATOM | 4505 | CD1 | TYR | B | 165 | 57.013 | 26.188 | 20.022 | 1.00 | 24.56 | C |
| ATOM | 4506 | CD2 | TYR | B | 165 | 58.122 | 24.595 | 18.624 | 1.00 | 24.98 | C |
| ATOM | 4507 | CE1 | TYR | B | 165 | 55.807 | 25.530 | 19.853 | 1.00 | 25.61 | C |
| ATOM | 4508 | CE2 | TYR | B | 165 | 56.903 | 23.914 | 18.444 | 1.00 | 26.00 | C |
| ATOM | 4509 | CZ | TYR | B | 165 | 55.747 | 24.383 | 19.057 | 1.00 | 25.87 | C |
| ATOM | 4510 | OH | TYR | B | 165 | 54.525 | 23.726 | 18.888 | 1.00 | 26.17 | O |
| ATOM | 4511 | N | GLU | B | 166 | 58.505 | 29.398 | 19.877 | 1.00 | 22.79 | N |
| ATOM | 4512 | CA | GLU | B | 166 | 57.469 | 30.358 | 20.186 | 1.00 | 22.31 | C |
| ATOM | 4513 | C | GLU | B | 166 | 57.338 | 31.477 | 19.167 | 1.00 | 21.50 | C |
| ATOM | 4514 | O | GLU | B | 166 | 56.205 | 31.894 | 18.848 | 1.00 | 21.26 | O |
| ATOM | 4515 | CB | GLU | B | 166 | 57.680 | 30.923 | 21.586 | 1.00 | 22.89 | C |
| ATOM | 4516 | CG | GLU | B | 166 | 57.294 | 29.897 | 22.678 | 1.00 | 24.53 | C |
| ATOM | 4517 | CD | GLU | B | 166 | 55.850 | 29.413 | 22.545 | 1.00 | 24.64 | C |
| ATOM | 4518 | OE1 | GLU | B | 166 | 54.920 | 30.271 | 22.539 | 1.00 | 24.70 | O |
| ATOM | 4519 | OE2 | GLU | B | 166 | 55.635 | 28.173 | 22.469 | 1.00 | 24.34 | O |
| ATOM | 4520 | N | LEU | B | 167 | 58.459 | 31.987 | 18.666 | 1.00 | 20.75 | N |
| ATOM | 4521 | CA | LEU | B | 167 | 58.397 | 33.054 | 17.641 | 1.00 | 20.82 | C |
| ATOM | 4522 | C | LEU | B | 167 | 57.680 | 32.527 | 16.368 | 1.00 | 21.06 | C |
| ATOM | 4523 | O | LEU | B | 167 | 56.815 | 33.197 | 15.822 | 1.00 | 19.63 | O |
| ATOM | 4524 | CB | LEU | B | 167 | 59.819 | 33.552 | 17.278 | 1.00 | 20.32 | C |
| ATOM | 4525 | CG | LEU | B | 167 | 59.853 | 34.579 | 16.109 | 1.00 | 20.72 | C |
| ATOM | 4526 | CD1 | LEU | B | 167 | 58.882 | 35.742 | 16.370 | 1.00 | 19.41 | C |
| ATOM | 4527 | CD2 | LEU | B | 167 | 61.293 | 35.113 | 15.935 | 1.00 | 19.73 | C |
| ATOM | 4528 | N | GLN | B | 168 | 58.058 | 31.326 | 15.897 | 1.00 | 20.78 | N |
| ATOM | 4529 | CA | GLN | B | 168 | 57.422 | 30.744 | 14.715 | 1.00 | 21.14 | C |
| ATOM | 4530 | C | GLN | B | 168 | 55.919 | 30.559 | 14.952 | 1.00 | 20.53 | C |
| ATOM | 4531 | O | GLN | B | 168 | 55.078 | 30.905 | 14.105 | 1.00 | 20.61 | O |
| ATOM | 4532 | CB | GLN | B | 168 | 58.060 | 29.381 | 14.342 | 1.00 | 21.80 | C |
| ATOM | 4533 | CG | GLN | B | 168 | 57.387 | 28.666 | 13.148 | 1.00 | 22.98 | C |
| ATOM | 4534 | CD | GLN | B | 168 | 57.836 | 29.193 | 11.755 | 1.00 | 25.22 | C |
| ATOM | 4535 | OE1 | GLN | B | 168 | 57.870 | 30.416 | 11.498 | 1.00 | 24.57 | O |
| ATOM | 4536 | NE2 | GLN | B | 168 | 58.171 | 28.260 | 10.855 | 1.00 | 23.88 | N |
| ATOM | 4537 | N | LYS | B | 169 | 55.577 | 30.016 | 16.111 | 1.00 | 20.74 | N |
| ATOM | 4538 | CA | LYS | B | 169 | 54.171 | 29.832 | 16.432 | 1.00 | 20.61 | C |
| ATOM | 4539 | C | LYS | B | 169 | 53.430 | 31.195 | 16.423 | 1.00 | 20.69 | C |
| ATOM | 4540 | O | LYS | B | 169 | 52.322 | 31.307 | 15.887 | 1.00 | 20.46 | O |
| ATOM | 4541 | CB | LYS | B | 169 | 54.042 | 29.160 | 17.815 | 1.00 | 20.91 | C |
| ATOM | 4542 | CG | LYS | B | 169 | 52.601 | 29.016 | 18.325 | 1.00 | 21.65 | C |
| ATOM | 4543 | CD | LYS | B | 169 | 52.573 | 28.346 | 19.690 | 1.00 | 20.67 | C |
| ATOM | 4544 | CE | LYS | B | 169 | 51.155 | 28.454 | 20.305 | 1.00 | 22.98 | C |
| ATOM | 4545 | NZ | LYS | B | 169 | 51.086 | 27.598 | 21.567 | 1.00 | 23.40 | N |
| ATOM | 4546 | N | ALA | B | 170 | 54.040 | 32.232 | 17.008 | 1.00 | 19.77 | N |
| ATOM | 4547 | CA | ALA | B | 170 | 53.407 | 33.565 | 17.031 | 1.00 | 20.29 | C |
| ATOM | 4548 | C | ALA | B | 170 | 53.300 | 34.147 | 15.612 | 1.00 | 20.54 | C |
| ATOM | 4549 | O | ALA | B | 170 | 52.284 | 34.781 | 15.282 | 1.00 | 20.65 | O |
| ATOM | 4550 | CB | ALA | B | 170 | 54.210 | 34.520 | 17.944 | 1.00 | 19.56 | C |
| ATOM | 4551 | N | LEU | B | 171 | 54.333 | 33.939 | 14.774 | 1.00 | 20.20 | N |
| ATOM | 4552 | CA | LEU | B | 171 | 54.292 | 34.432 | 13.387 | 1.00 | 20.26 | C |
| ATOM | 4553 | C | LEU | B | 171 | 53.112 | 33.759 | 12.648 | 1.00 | 20.92 | C |
| ATOM | 4554 | O | LEU | B | 171 | 52.350 | 34.399 | 11.897 | 1.00 | 20.16 | O |
| ATOM | 4555 | CB | LEU | B | 171 | 55.594 | 34.094 | 12.659 | 1.00 | 20.11 | C |
| ATOM | 4556 | CG | LEU | B | 171 | 56.826 | 34.942 | 13.096 | 1.00 | 21.41 | C |
| ATOM | 4557 | CD1 | LEU | B | 171 | 58.072 | 34.288 | 12.465 | 1.00 | 20.35 | C |
| ATOM | 4558 | CD2 | LEU | B | 171 | 56.700 | 36.413 | 12.688 | 1.00 | 19.28 | C |
| ATOM | 4559 | N | ILE | B | 172 | 52.978 | 32.453 | 12.862 | 1.00 | 20.59 | N |
| ATOM | 4560 | CA | ILE | B | 172 | 51.883 | 31.716 | 12.254 | 1.00 | 21.65 | C |
| ATOM | 4561 | C | ILE | B | 172 | 50.508 | 32.195 | 12.757 | 1.00 | 21.25 | C |
| ATOM | 4562 | O | ILE | B | 172 | 49.581 | 32.414 | 11.966 | 1.00 | 21.54 | O |
| ATOM | 4563 | CB | ILE | B | 172 | 52.052 | 30.225 | 12.535 | 1.00 | 22.30 | C |
| ATOM | 4564 | CG1 | ILE | B | 172 | 53.194 | 29.703 | 11.647 | 1.00 | 22.97 | C |
| ATOM | 4565 | CG2 | ILE | B | 172 | 50.717 | 29.488 | 12.289 | 1.00 | 21.94 | C |
| ATOM | 4566 | CD1 | ILE | B | 172 | 53.661 | 28.295 | 11.968 | 1.00 | 23.23 | C |
| ATOM | 4567 | N | ALA | B | 173 | 50.362 | 32.361 | 14.062 | 1.00 | 22.43 | N |
| ATOM | 4568 | CA | ALA | B | 173 | 49.066 | 32.831 | 14.594 | 1.00 | 22.09 | C |

| ATOM | 4569 | C | ALA B 173 | 48.688 | 34.163 | 13.911 | 1.00 | 22.09 | C |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 4570 | O | ALA B 173 | 47.495 | 34.429 | 13.610 | 1.00 | 22.07 | O |
| ATOM | 4571 | CB | ALA B 173 | 49.159 | 33.030 | 16.134 | 1.00 | 23.29 | C |
| ATOM | 4572 | N | ALA B 174 | 49.703 | 34.986 | 13.647 | 1.00 | 21.47 | N |
| ATOM | 4573 | CA | ALA B 174 | 49.481 | 36.302 | 13.026 | 1.00 | 21.86 | C |
| ATOM | 4574 | C | ALA B 174 | 49.226 | 36.231 | 11.511 | 1.00 | 21.87 | C |
| ATOM | 4575 | O | ALA B 174 | 48.806 | 37.223 | 10.903 | 1.00 | 21.99 | O |
| ATOM | 4576 | CB | ALA B 174 | 50.698 | 37.240 | 13.331 | 1.00 | 21.87 | C |
| ATOM | 4577 | N | GLY B 175 | 49.509 | 35.079 | 10.891 | 1.00 | 21.36 | N |
| ATOM | 4578 | CA | GLY B 175 | 49.243 | 34.930 | 9.455 | 1.00 | 21.73 | C |
| ATOM | 4579 | C | GLY B 175 | 50.424 | 34.948 | 8.490 | 1.00 | 21.74 | C |
| ATOM | 4580 | O. | GLY B 175 | 50.248 | 35.197 | 7.289 | 1.00 | 22.47 | O |
| ATOM | 4581 | N | VAL B 176 | 51.620 | 34.676 | 8.993 | 1.00 | 21.55 | N |
| ATOM | 4582 | CA | VAL B 176 | 52.805 | 34.687 | 8.155 | 1.00 | 20.88 | C |
| ATOM | 4583 | C | VAL B 176 | 52.781 | 33.553 | 7.132 | 1.00 | 21.69 | C |
| ATOM | 4584 | O | VAL B 176 | 52.157 | 32.480 | 7.378 | 1.00 | 21.62 | O |
| ATOM | 4585 | CB | VAL B 176 | 54.092 | 34.581 | 9.039 | 1.00 | 21.00 | C |
| ATOM | 4586 | CG1 | VAL B 176 | 54.536 | 33.122 | 9.213 | 1.00 | 20.41 | C |
| ATOM | 4587 | CG2 | VAL B 176 | 55.210 | 35.408 | 8.419 | 1.00 | 20.29 | C |
| ATOM | 4588 | N | ALA B 177 | 53.432 | 33.778 | 5.995 | 1.00 | 21.53 | N |
| ATOM | 4589 | CA | ALA B 177 | 53.519 | 32.756 | 4.931 | 1.00 | 22.29 | C |
| ATOM | 4590 | C | ALA B 177 | 54.865 | 32.045 | 4.971 | 1.00 | 22.87 | C |
| ATOM | 4591 | O | ALA B 177 | 54.959 | 30.842 | 4.642 | 1.00 | 23.01 | O |
| ATOM | 4592 | CB | ALA B 177 | 53.324 | 33.397 | 3.542 | 1.00 | 22.51 | C |
| ATOM | 4593 | N | GLY B 178 | 55.902 | 32.785 | 5.376 | 1.00 | 22.08 | N |
| ATOM | 4594 | CA | GLY B 178 | 57.250 | 32.246 | 5.469 | 1.00 | 22.83 | C |
| ATOM | 4595 | C | GLY B 178 | 58.095 | 33.009 | 6.499 | 1.00 | 22.92 | C |
| ATOM | 4596 | O | GLY B 178 | 57.790 | 34.146 | 6.832 | 1.00 | 22.55 | O |
| ATOM | 4597 | N | SER B 179 | 59.157 | 32.390 | 7.002 | 1.00 | 22.87 | N |
| ATOM | 4598 | CA | SER B 179 | 60.003 | 33.030 | 8.011 | 1.00 | 22.74 | C |
| ATOM | 4599 | C | SER B 179 | 61.453 | 32.631 | 7.780 | 1.00 | 23.17 | C |
| ATOM | 4600 | O | SER B 179 | 61.722 | 31.494 | 7.340 | 1.00 | 22.48 | O |
| ATOM | 4601 | CB | SER B 179 | 59.566 | 32.611 | 9.429 | 1.00 | 23.43 | C |
| ATOM | 4602 | OG | SER B 179 | 59.425 | 31.192 | 9.545 | 1.00 | 23.35 | O |
| ATOM | 4603 | N | HIS B 180 | 62.377 | 33.564 | 8.051 | 1.00 | 23.24 | N |
| ATOM | 4604 | CA | HIS B 180 | 63.790 | 33.272 | 7.878 | 1.00 | 23.66 | C |
| ATOM | 4605 | C | HIS B 180 | 64.516 | 33.307 | 9.217 | 1.00 | 24.58 | C |
| ATOM | 4606 | O | HIS B 180 | 64.163 | 34.092 | 10.126 | 1.00 | 24.59 | O |
| ATOM | 4607 | CB | HIS B 180 | 64.430 | 34.186 | 6.792 | 1.00 | 23.90 | C |
| ATOM | 4608 | CG | HIS B 180 | 64.494 | 35.655 | 7.124 | 1.00 | 22.87 | C |
| ATOM | 4609 | ND1 | HIS B 180 | 65.409 | 36.173 | 8.017 | 1.00 | 23.54 | N |
| ATOM | 4610 | CD2 | HIS B 180 | 63.912 | 36.724 | 6.524 | 1.00 | 22.82 | C |
| ATOM | 4611 | CE1 | HIS B 180 | 65.405 | 37.494 | 7.937 | 1.00 | 22.97 | C |
| ATOM | 4612 | NE2 | HIS B 180 | 64.504 | 37.856 | 7.036 | 1.00 | 22.79 | N |
| ATOM | 4613 | N | TRP B 181 | 65.497 | 32.410 | 9.340 | 1.00 | 23.98 | N |
| ATOM | 4614 | CA | TRP B 181 | 66.251 | 32.192 | 10.564 | 1.00 | 24.43 | C |
| ATOM | 4615 | C | TRP B 181 | 67.738 | 32.136 | 10.231 | 1.00 | 24.83 | C |
| ATOM | 4616 | O | TRP B 181 | 68.128 | 31.413 | 9.323 | 1.00 | 25.56 | O |
| ATOM | 4617 | CB | TRP B 181 | 65.790 | 30.861 | 11.153 | 1.00 | 23.27 | C |
| ATOM | 4618 | CG | TRP B 181 | 64.291 | 30.794 | 11.185 | 1.00 | 23.80 | C |
| ATOM | 4619 | CD1 | TRP B 181 | 63.440 | 30.452 | 10.168 | 1.00 | 22.77 | C |
| ATOM | 4620 | CD2 | TRP B 181 | 63.472 | 31.160 | 12.301 | 1.00 | 23.00 | C |
| ATOM | 4621 | NE1 | TRP B 181 | 62.115 | 30.588 | 10.597 | 1.00 | 23.03 | N |
| ATOM | 4622 | CE2 | TRP B 181 | 62.125 | 31.019 | 11.906 | 1.00 | 23.52 | C |
| ATOM | 4623 | CE3 | TRP B 181 | 63.757 | 31.607 | 13.603 | 1.00 | 24.52 | C |
| ATOM | 4624 | CZ2 | TRP B 181 | 61.053 | 31.310 | 12.775 | 1.00 | 22.96 | C |
| ATOM | 4625 | CZ3 | TRP B 181 | 62.685 | 31.900 | 14.467 | 1.00 | 23.53 | C |
| ATOM | 4626 | CH2 | TRP B 181 | 61.353 | 31.745 | 14.035 | 1.00 | 23.48 | C |
| ATOM | 4627 | N | GLU B 182 | 68.562 | 32.863 | 10.989 | 1.00 | 24.91 | N |
| ATOM | 4628 | CA | GLU B 182 | 69.989 | 32.934 | 10.689 | 1.00 | 24.97 | C |
| ATOM | 4629 | C | GLU B 182 | 70.862 | 32.305 | 11.790 | 1.00 | 25.52 | C |
| ATOM | 4630 | O | GLU B 182 | 70.437 | 32.116 | 12.937 | 1.00 | 24.63 | O |
| ATOM | 4631 | CB | GLU B 182 | 70.388 | 34.412 | 10.446 | 1.00 | 24.37 | C |
| ATOM | 4632 | CG | GLU B 182 | 70.308 | 35.285 | 11.697 | 1.00 | 24.90 | C |
| ATOM | 4633 | CD | GLU B 182 | 70.128 | 36.759 | 11.369 | 1.00 | 24.89 | C |
| ATOM | 4634 | OE1 | GLU B 182 | 69.260 | 37.089 | 10.544 | 1.00 | 25.50 | O |
| ATOM | 4635 | OE2 | GLU B 182 | 70.842 | 37.602 | 11.935 | 1.00 | 25.75 | O |
| ATOM | 4636 | N | ASP B 183 | 72.106 | 32.030 | 11.416 | 1.00 | 25.79 | N |
| ATOM | 4637 | CA | ASP B 183 | 73.043 | 31.313 | 12.264 | 1.00 | 26.11 | C |
| ATOM | 4638 | C | ASP B 183 | 74.094 | 32.107 | 13.026 | 1.00 | 26.63 | C |
| ATOM | 4639 | O | ASP B 183 | 75.251 | 31.659 | 13.136 | 1.00 | 26.05 | O |
| ATOM | 4640 | CB | ASP B 183 | 73.768 | 30.258 | 11.403 | 1.00 | 26.33 | C |
| ATOM | 4641 | CG | ASP B 183 | 74.474 | 30.876 | 10.189 | 1.00 | 26.27 | C |
| ATOM | 4642 | OD1 | ASP B 183 | 74.565 | 32.125 | 10.076 | 1.00 | 25.68 | O |
| ATOM | 4643 | OD2 | ASP B 183 | 74.936 | 30.100 | 9.347 | 1.00 | 27.50 | O |
| ATOM | 4644 | N | GLN B 184 | 73.702 | 33.261 | 13.565 | 1.00 | 26.93 | N |
| ATOM | 4645 | CA | GLN B 184 | 74.621 | 34.052 | 14.343 | 1.00 | 27.69 | C |
| ATOM | 4646 | C | GLN B 184 | 74.010 | 34.318 | 15.720 | 1.00 | 28.55 | C |
| ATOM | 4647 | O | GLN B 184 | 72.826 | 34.021 | 15.982 | 1.00 | 28.28 | O |
| ATOM | 4648 | CB | GLN B 184 | 74.929 | 35.384 | 13.632 | 1.00 | 28.84 | C |

| ATOM | 4649 | CG | GLN | B | 184 | 73.767 | 36.371 | 13.607 | 1.00 | 28.63 | C |
|------|------|------|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4650 | CD | GLN | B | 184 | 74.211 | 37.769 | 13.212 | 1.00 | 28.62 | C |
| ATOM | 4651 | OE1 | GLN | B | 184 | 75.095 | 38.350 | 13.845 | 1.00 | 29.09 | O |
| ATOM | 4652 | NE2 | GLN | B | 184 | 73.591 | 38.320 | 12.178 | 1.00 | 28.48 | N |
| ATOM | 4653 | N | LEU | B | 185 | 74.836 | 34.851 | 16.609 | 1.00 | 28.90 | N |
| ATOM | 4654 | CA | LEU | B | 185 | 74.419 | 35.218 | 17.948 | 1.00 | 29.61 | C |
| ATOM | 4655 | C | LEU | B | 185 | 74.676 | 36.733 | 17.968 | 1.00 | 29.68 | C |
| ATOM | 4656 | O | LEU | B | 185 | 75.745 | 37.200 | 18.369 | 1.00 | 29.27 | O |
| ATOM | 4657 | CB | LEU | B | 185 | 75.275 | 34.477 | 18.993 | 1.00 | 29.10 | C |
| ATOM | 4658 | CG | LEU | B | 185 | 75.021 | 34.837 | 20.468 | 1.00 | 29.98 | C |
| ATOM | 4659 | CD1 | LEU | B | 185 | 73.511 | 34.662 | 20.794 | 1.00 | 29.96 | C |
| ATOM | 4660 | CD2 | LEU | B | 185 | 75.872 | 33.944 | 21.391 | 1.00 | 30.03 | C |
| ATOM | 4661 | N | ALA | B | 186 | 73.685 | 37.486 | 17.500 | 1.00 | 29.91 | N |
| ATOM | 4662 | CA | ALA | B | 186 | 73.765 | 38.940 | 17.407 | 1.00 | 30.79 | C |
| ATOM | 4663 | C | ALA | B | 186 | 74.098 | 39.620 | 18.729 | 1.00 | 31.62 | C |
| ATOM | 4664 | O | ALA | B | 186 | 74.869 | 40.586 | 18.758 | 1.00 | 31.61 | O |
| ATOM | 4665 | CB | ALA | B | 186 | 72.445 | 39.505 | 16.854 | 1.00 | 30.39 | C |
| ATOM | 4666 | N | SER | B | 187 | 73.517 | 39.119 | 19.814 | 1.00 | 31.96 | N |
| ATOM | 4667 | CA | SER | B | 187 | 73.730 | 39.702 | 21.137 | 1.00 | 33.12 | C |
| ATOM | 4668 | C | SER | B | 187 | 75.168 | 39.621 | 21.646 | 1.00 | 33.74 | C |
| ATOM | 4669 | O | SER | B | 187 | 75.493 | 40.208 | 22.703 | 1.00 | 33.84 | O |
| ATOM | 4670 | CB | SER | B | 187 | 72.779 | 39.056 | 22.153 | 1.00 | 33.03 | C |
| ATOM | 4671 | OG | SER | B | 187 | 72.943 | 37.653 | 22.174 | 1.00 | 32.95 | O |
| ATOM | 4672 | N | GLU | B | 188 | 76.024 | 38.907 | 20.912 | 1.00 | 34.54 | N |
| ATOM | 4673 | CA | GLU | B | 188 | 77.429 | 38.809 | 21.300 | 1.00 | 35.85 | C |
| ATOM | 4674 | C | GLU | B | 188 | 78.341 | 39.440 | 20.249 | 1.00 | 36.77 | C |
| ATOM | 4675 | O | GLU | B | 188 | 79.562 | 39.330 | 20.357 | 1.00 | 36.38 | O |
| ATOM | 4676 | CB | GLU | B | 188 | 77.855 | 37.357 | 21.525 | 1.00 | 36.70 | C |
| ATOM | 4677 | CG | GLU | B | 188 | 77.348 | 36.692 | 22.820 | 1.00 | 37.63 | C |
| ATOM | 4678 | CD | GLU | B | 188 | 77.684 | 37.455 | 24.112 | 1.00 | 38.69 | C |
| ATOM | 4679 | OE1 | GLU | B | 188 | 78.794 | 38.039 | 24.241 | 1.00 | 38.93 | O |
| ATOM | 4680 | OE2 | GLU | B | 188 | 76.820 | 37.451 | 25.024 | 1.00 | 39.01 | O |
| ATOM | 4681 | N | LYS | B | 189 | 77.760 | 40.094 | 19.239 | 1.00 | 38.07 | N |
| ATOM | 4682 | CA | LYS | B | 189 | 78.557 | 40.749 | 18.203 | 1.00 | 40.92 | C |
| ATOM | 4683 | C | LYS | B | 189 | 79.627 | 41.613 | 18.871 | 1.00 | 42.76 | C |
| ATOM | 4684 | O | LYS | B | 189 | 79.311 | 42.461 | 19.706 | 1.00 | 42.01 | O |
| ATOM | 4685 | CB | LYS | B | 189 | 77.694 | 41.661 | 17.329 | 1.00 | 41.21 | C |
| ATOM | 4686 | CG | LYS | B | 189 | 78.493 | 42.318 | 16.188 | 1.00 | 42.94 | C |
| ATOM | 4687 | CD | LYS | B | 189 | 77.635 | 43.124 | 15.203 | 1.00 | 44.34 | C |
| ATOM | 4688 | CE | LYS | B | 189 | 77.068 | 44.401 | 15.837 | 1.00 | 45.38 | C |
| ATOM | 4689 | NZ | LYS | B | 189 | 78.098 | 45.265 | 16.554 | 1.00 | 47.08 | N |
| ATOM | 4690 | N | LYS | B | 190 | 80.888 | 41.415 | 18.499 | 1.00 | 45.68 | N |
| ATOM | 4691 | CA | LYS | B | 190 | 81.962 | 42.193 | 19.112 | 1.00 | 48.92 | C |
| ATOM | 4692 | C | LYS | B | 190 | 82.250 | 43.479 | 18.375 | 1.00 | 50.80 | C |
| ATOM | 4693 | O | LYS | B | 190 | 82.235 | 43.527 | 17.148 | 1.00 | 50.79 | O |
| ATOM | 4694 | CB | LYS | B | 190 | 83.231 | 41.349 | 19.260 | 1.00 | 49.81 | C |
| ATOM | 4695 | CG | LYS | B | 190 | 83.177 | 40.435 | 20.510 | 1.00 | 51.50 | C |
| ATOM | 4696 | CD | LYS | B | 190 | 82.682 | 41.223 | 21.781 | 1.00 | 51.95 | C |
| ATOM | 4697 | CE | LYS | B | 190 | 82.154 | 40.330 | 22.949 | 1.00 | 51.96 | C |
| ATOM | 4698 | NZ | LYS | B | 190 | 80.898 | 39.504 | 22.672 | 1.00 | 50.86 | N |
| ATOM | 4699 | N | CYS | B | 191 | 82.480 | 44.532 | 19.151 | 1.00 | 53.41 | N |
| ATOM | 4700 | CA | CYS | B | 191 | 82.753 | 45.862 | 18.609 | 1.00 | 56.49 | C |
| ATOM | 4701 | C | CYS | B | 191 | 84.178 | 46.068 | 18.128 | 1.00 | 57.33 | C |
| ATOM | 4702 | O | CYS | B | 191 | 85.119 | 45.418 | 18.623 | 1.00 | 57.75 | O |
| ATOM | 4703 | CB | CYS | B | 191 | 82.459 | 46.933 | 19.665 | 1.00 | 57.55 | C |
| ATOM | 4704 | SG | CYS | B | 191 | 80.718 | 47.356 | 19.800 | 1.00 | 62.06 | S |
| ATOM | 4705 | N | GLY | B | 192 | 84.313 | 46.993 | 17.173 | 1.00 | 58.25 | N |
| ATOM | 4706 | CA | GLY | B | 192 | 85.602 | 47.375 | 16.608 | 1.00 | 58.96 | C |
| ATOM | 4707 | C | GLY | B | 192 | 86.618 | 46.339 | 16.146 | 1.00 | 59.54 | C |
| ATOM | 4708 | O | GLY | B | 192 | 86.286 | 45.201 | 15.779 | 1.00 | 59.82 | O |
| ATOM | 4709 | N | HIS | B | 193 | 87.877 | 46.781 | 16.154 | 1.00 | 59.83 | N |
| ATOM | 4710 | CA | HIS | B | 193 | 89.054 | 46.004 | 15.751 | 1.00 | 59.94 | C |
| ATOM | 4711 | C | HIS | B | 193 | 89.024 | 44.522 | 16.147 | 1.00 | 59.05 | C |
| ATOM | 4712 | O | HIS | B | 193 | 88.925 | 44.176 | 17.344 | 1.00 | 59.21 | O |
| ATOM | 4713 | CB | HIS | B | 193 | 90.309 | 46.673 | 16.337 | 1.00 | 61.75 | C |
| ATOM | 4714 | CG | HIS | B | 193 | 91.592 | 45.972 | 16.004 | 1.00 | 63.71 | C |
| ATOM | 4715 | ND1 | HIS | B | 193 | 91.995 | 45.731 | 14.704 | 1.00 | 64.67 | N |
| ATOM | 4716 | CD2 | HIS | B | 193 | 92.572 | 45.481 | 16.803 | 1.00 | 64.20 | C |
| ATOM | 4717 | CE1 | HIS | B | 193 | 93.171 | 45.121 | 14.718 | 1.00 | 65.12 | C |
| ATOM | 4718 | NE2 | HIS | B | 193 | 93.543 | 44.958 | 15.979 | 1.00 | 65.28 | N |
| ATOM | 4719 | N | LEU | B | 194 | 89.108 | 43.652 | 15.139 | 1.00 | 57.38 | N |
| ATOM | 4720 | CA | LEU | B | 194 | 89.110 | 42.210 | 15.388 | 1.00 | 56.05 | C |
| ATOM | 4721 | C | LEU | B | 194 | 87.778 | 41.678 | 15.958 | 1.00 | 54.64 | C |
| ATOM | 4722 | O | LEU | B | 194 | 87.726 | 40.551 | 16.494 | 1.00 | 54.63 | O |
| ATOM | 4723 | CB | LEU | B | 194 | 90.255 | 41.862 | 16.354 | 1.00 | 56.62 | C |
| ATOM | 4724 | CG | LEU | B | 194 | 91.638 | 42.319 | 15.867 | 1.00 | 57.10 | C |
| ATOM | 4725 | CD1 | LEU | B | 194 | 92.675 | 42.191 | 17.005 | 1.00 | 56.94 | C |
| ATOM | 4726 | CD2 | LEU | B | 194 | 92.022 | 41.497 | 14.621 | 1.00 | 56.98 | C |
| ATOM | 4727 | N | GLY | B | 195 | 86.716 | 42.485 | 15.857 | 1.00 | 52.70 | N |
| ATOM | 4728 | CA | GLY | B | 195 | 85.410 | 42.061 | 16.358 | 1.00 | 49.88 | C |

| ATOM | 4729 | C | GLY | B | 195 | 84.587 | 41.459 | 15.226 | 1.00 | 47.99 | C |
|------|------|------|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4730 | O | GLY | B | 195 | 85.130 | 40.709 | 14.395 | 1.00 | 48.56 | O |
| ATOM | 4731 | N | GLY | B | 196 | 83.288 | 41.776 | 15.171 | 1.00 | 45.20 | N |
| ATOM | 4732 | CA | GLY | B | 196 | 82.455 | 41.247 | 14.105 | 1.00 | 40.88 | C |
| ATOM | 4733 | C | GLY | B | 196 | 81.379 | 40.287 | 14.586 | 1.00 | 37.93 | C |
| ATOM | 4734 | O | GLY | B | 196 | 81.216 | 40.053 | 15.784 | 1.00 | 37.87 | O |
| ATOM | 4735 | N | LYS | B | 197 | 80.641 | 39.730 | 13.638 | 1.00 | 35.45 | N |
| ATOM | 4736 | CA | LYS | B | 197 | 79.574 | 38.790 | 13.955 | 1.00 | 33.11 | C |
| ATOM | 4737 | C | LYS | B | 197 | 80.128 | 37.449 | 14.482 | 1.00 | 31.76 | C |
| ATOM | 4738 | O | LYS | B | 197 | 81.223 | 36.997 | 14.110 | 1.00 | 30.93 | O |
| ATOM | 4739 | CB | LYS | B | 197 | 78.689 | 38.551 | 12.717 | 1.00 | 32.39 | C |
| ATOM | 4740 | CG | LYS | B | 197 | 78.028 | 39.839 | 12.180 | 1.00 | 30.81 | C |
| ATOM | 4741 | CD | LYS | B | 197 | 76.996 | 39.548 | 11.076 | 1.00 | 30.70 | C |
| ATOM | 4742 | CE | LYS | B | 197 | 77.665 | 39.033 | 9.808 | 1.00 | 28.75 | C |
| ATOM | 4743 | NZ | LYS | B | 197 | 76.666 | 38.877 | 8.702 | 1.00 | 28.84 | N |
| ATOM | 4744 | N | VAL | B | 198 | 79.341 | 36.829 | 15.352 | 1.00 | 29.80 | N |
| ATOM | 4745 | CA | VAL | B | 198 | 79.683 | 35.576 | 15.970 | 1.00 | 28.59 | C |
| ATOM | 4746 | C | VAL | B | 198 | 78.666 | 34.529 | 15.505 | 1.00 | 29.13 | C |
| ATOM | 4747 | O' | VAL | B | 198 | 77.442 | 34.648 | 15.773 | 1.00 | 28.63 | O |
| ATOM | 4748 | CB | VAL | B | 198 | 79.646 | 35.721 | 17.519 | 1.00 | 28.17 | C |
| ATOM | 4749 | CG1 | VAL | B | 198 | 79.965 | 34.384 | 18.193 | 1.00 | 27.46 | C |
| ATOM | 4750 | CG2 | VAL | B | 198 | 80.643 | 36.810 | 17.972 | 1.00 | 26.52 | C |
| ATOM | 4751 | N | LEU | B | 199 | 79.160 | 33.512 | 14.802 | 1.00 | 28.25 | N |
| ATOM | 4752 | CA | LEU | B | 199 | 78.308 | 32.439 | 14.301 | 1.00 | 27.78 | C |
| ATOM | 4753 | C | LEU | B | 199 | 78.064 | 31.415 | 15.403 | 1.00 | 27.72 | C |
| ATOM | 4754 | O | LEU | B | 199 | 78.832 | 31.352 | 16.379 | 1.00 | 27.21 | O |
| ATOM | 4755 | CB | LEU | B | 199 | 79.009 | 31.704 | 13.154 | 1.00 | 27.97 | C |
| ATOM | 4756 | CG | LEU | B | 199 | 79.358 | 32.452 | 11.872 | 1.00 | 27.67 | C |
| ATOM | 4757 | CD1 | LEU | B | 199 | 80.166 | 31.527 | 10.931 | 1.00 | 27.35 | C |
| ATOM | 4758 | CD2 | LEU | B | 199 | 78.064 | 32.888 | 11.204 | 1.00 | 27.05 | C |
| ATOM | 4759 | N | ILE | B | 200 | 77.005 | 30.619 | 15.256 | 1.00 | 27.43 | N |
| ATOM | 4760 | CA | ILE | B | 200 | 76.779 | 29.541 | 16.212 | 1.00 | 27.80 | C |
| ATOM | 4761 | C | ILE | B | 200 | 77.110 | 28.255 | 15.431 | 1.00 | 27.73 | C |
| ATOM | 4762 | O | ILE | B | 200 | 77.239 | 28.285 | 14.200 | 1.00 | 27.95 | O |
| ATOM | 4763 | CB | ILE | B | 200 | 75.337 | 29.526 | 16.841 | 1.00 | 28.21 | C |
| ATOM | 4764 | CG1 | ILE | B | 200 | 74.267 | 29.919 | 15.830 | 1.00 | 29.15 | C |
| ATOM | 4765 | CG2 | ILE | B | 200 | 75.310 | 30.487 | 18.080 | 1.00 | 28.57 | C |
| ATOM | 4766 | CD1 | ILE | B | 200 | 73.961 | 28.883 | 14.798 | 1.00 | 28.34 | C |
| ATOM | 4767 | N | PRO | B | 201 | 77.288 | 27.122 | 16.132 | 1.00 | 27.82 | N |
| ATOM | 4768 | CA | PRO | B | 201 | 77.621 | 25.876 | 15.438 | 1.00 | 28.20 | C |
| ATOM | 4769 | C | PRO | B | 201 | 76.622 | 25.471 | 14.373 | 1.00 | 28.71 | C |
| ATOM | 4770 | O | PRO | B | 201 | 75.423 | 25.727 | 14.502 | 1.00 | 29.37 | O |
| ATOM | 4771 | CB | PRO | B | 201 | 77.691 | 24.848 | 16.574 | 1.00 | 27.81 | C |
| ATOM | 4772 | CG | PRO | B | 201 | 78.175 | 25.659 | 17.745 | 1.00 | 28.01 | C |
| ATOM | 4773 | CD | PRO | B | 201 | 77.318 | 26.938 | 17.594 | 1.00 | 27.33 | C |
| ATOM | 4774 | N | THR | B | 202 | 77.111 | 24.816 | 13.322 | 1.00 | 28.35 | N |
| ATOM | 4775 | CA | THR | B | 202 | 76.237 | 24.361 | 12.255 | 1.00 | 28.15 | C |
| ATOM | 4776 | C | THR | B | 202 | 75.101 | 23.506 | 12.836 | 1.00 | 28.91 | C |
| ATOM | 4777 | O | THR | B | 202 | 73.937 | 23.617 | 12.409 | 1.00 | 29.23 | O |
| ATOM | 4778 | CB | THR | B | 202 | 77.034 | 23.509 | 11.223 | 1.00 | 28.35 | C |
| ATOM | 4779 | OG1 | THR | B | 202 | 77.848 | 24.372 | 10.422 | 1.00 | 27.57 | O |
| ATOM | 4780 | CG2 | THR | B | 202 | 76.087 | 22.736 | 10.314 | 1.00 | 28.00 | C |
| ATOM | 4781 | N | GLN | B | 203 | 75.405 | 22.671 | 13.818 | 1.00 | 28.16 | N |
| ATOM | 4782 | CA | GLN | B | 203 | 74.320 | 21.837 | 14.346 | 1.00 | 29.78 | C |
| ATOM | 4783 | C | GLN | B | 203 | 73.276 | 22.677 | 15.085 | 1.00 | 28.68 | C |
| ATOM | 4784 | O | GLN | B | 203 | 72.106 | 22.335 | 15.111 | 1.00 | 28.74 | O |
| ATOM | 4785 | CB | GLN | B | 203 | 74.841 | 20.759 | 15.307 | 1.00 | 30.87 | C |
| ATOM | 4786 | CG | GLN | B | 203 | 73.748 | 19.666 | 15.638 | 1.00 | 34.48 | C |
| ATOM | 4787 | CD | GLN | B | 203 | 73.085 | 18.968 | 14.393 | 1.00 | 36.30 | C |
| ATOM | 4788 | OE1 | GLN | B | 203 | 73.743 | 18.713 | 13.372 | 1.00 | 37.47 | O |
| ATOM | 4789 | NE2 | GLN | B | 203 | 71.789 | 18.621 | 14.511 | 1.00 | 36.40 | N |
| ATOM | 4790 | N | GLN | B | 204 | 73.704 | 23.758 | 15.714 | 1.00 | 28.29 | N |
| ATOM | 4791 | CA | GLN | B | 204 | 72.731 | 24.580 | 16.424 | 1.00 | 27.91 | C |
| ATOM | 4792 | C | GLN | B | 204 | 71.752 | 25.210 | 15.427 | 1.00 | 27.61 | C |
| ATOM | 4793 | O | GLN | B | 204 | 70.566 | 25.353 | 15.730 | 1.00 | 28.16 | O |
| ATOM | 4794 | CB | GLN | B | 204 | 73.424 | 25.672 | 17.247 | 1.00 | 27.82 | C |
| ATOM | 4795 | CG | GLN | B | 204 | 72.431 | 26.487 | 18.076 | 1.00 | 28.08 | C |
| ATOM | 4796 | CD | GLN | B | 204 | 73.120 | 27.368 | 19.079 | 1.00 | 28.27 | C |
| ATOM | 4797 | OE1 | GLN | B | 204 | 74.051 | 26.942 | 19.732 | 1.00 | 29.89 | O |
| ATOM | 4798 | NE2 | GLN | B | 204 | 72.662 | 28.599 | 19.215 | 1.00 | 28.83 | N |
| ATOM | 4799 | N | HIS | B | 205 | 72.222 | 25.589 | 14.235 | 1.00 | 26.93 | N |
| ATOM | 4800 | CA | HIS | B | 205 | 71.276 | 26.153 | 13.290 | 1.00 | 26.91 | C |
| ATOM | 4801 | C | HIS | B | 205 | 70.327 | 25.110 | 12.764 | 1.00 | 26.92 | C |
| ATOM | 4802 | O | HIS | B | 205 | 69.161 | 25.399 | 12.466 | 1.00 | 26.64 | O |
| ATOM | 4803 | CB | HIS | B | 205 | 71.940 | 26.850 | 12.122 | 1.00 | 26.66 | C |
| ATOM | 4804 | CG | HIS | B | 205 | 71.028 | 27.836 | 11.461 | 1.00 | 26.81 | C |
| ATOM | 4805 | ND1 | HIS | B | 205 | 70.342 | 28.789 | 12.183 | 1.00 | 26.06 | N |
| ATOM | 4806 | CD2 | HIS | B | 205 | 70.647 | 27.995 | 10.167 | 1.00 | 26.84 | C |
| ATOM | 4807 | CE1 | HIS | B | 205 | 69.572 | 29.492 | 11.365 | 1.00 | 26.41 | C |
| ATOM | 4808 | NE2 | HIS | B | 205 | 69.739 | 29.035 | 10.136 | 1.00 | 25.23 | N |

| ATOM | 4809 | N | ILE B 206 | 70.805 | 23.867 | 12.649 | 1.00 | 27.20 | N |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 4810 | CA | ILE B 206 | 69.898 | 22.809 | 12.195 | 1.00 | 26.40 | C |
| ATOM | 4811 | C | ILE B 206 | 68.788 | 22.648 | 13.267 | 1.00 | 25.87 | C |
| ATOM | 4812 | O | ILE B 206 | 67.610 | 22.376 | 12.958 | 1.00 | 26.01 | O |
| ATOM | 4813 | CB | ILE B 206 | 70.691 | 21.479 | 11.943 | 1.00 | 26.72 | C |
| ATOM | 4814 | CG1 | ILE B 206 | 71.552 | 21.648 | 10.668 | 1.00 | 26.86 | C |
| ATOM | 4815 | CG2 | ILE B 206 | 69.699 | 20.327 | 11.786 | 1.00 | 26.44 | C |
| ATOM | 4816 | CD1 | ILE B 206 | 72.564 | 20.490 | 10.345 | 1.00 | 27.88 | C |
| ATOM | 4817 | N | ARG B 207 | 69.165 | 22.819 | 14.529 | 1.00 | 26.18 | N |
| ATOM | 4818 | CA | ARG B 207 | 68.191 | 22.767 | 15.629 | 1.00 | 25.66 | C |
| ATOM | 4819 | C | ARG B 207 | 67.175 | 23.918 | 15.434 | 1.00 | 25.13 | C |
| ATOM | 4820 | O | ARG B 207 | 65.941 | 23.726 | 15.500 | 1.00 | 25.34 | O |
| ATOM | 4821 | CB | ARG B 207 | 68.917 | 22.940 | 16.964 | 1.00 | 26.31 | C |
| ATOM | 4822 | CG | ARG B 207 | 67.993 | 22.790 | 18.205 | 1.00 | 26.52 | C |
| ATOM | 4823 | CD | ARG B 207 | 68.762 | 23.037 | 19.497 | 1.00 | 27.64 | C |
| ATOM | 4824 | NE | ARG B 207 | 69.066 | 24.466 | 19.598 | 1.00 | 29.14 | N |
| ATOM | 4825 | CZ | ARG B 207 | 69.788 | 25.024 | 20.566 | 1.00 | 29.17 | C |
| ATOM | 4826 | NH1 | ARG B 207 | 70.288 | 24.262 | 21.530 | 1.00 | 29.10 | N |
| ATOM | 4827 | NH2 | ARG B 207 | 69.999 | 26.343 | 20.572 | 1.00 | 28.71 | N |
| ATOM | 4828 | N | THR B 208 | 67.685 | 25.110 | 15.158 | 1.00 | 24.54 | N |
| ATOM | 4829 | CA | THR B 208 | 66.785 | 26.243 | 14.942 | 1.00 | 24.06 | C |
| ATOM | 4830 | C | THR B 208 | 65.812 | 25.921 | 13.828 | 1.00 | 24.18 | C |
| ATOM | 4831 | O | THR B 208 | 64.598 | 26.078 | 13.994 | 1.00 | 24.52 | O |
| ATOM | 4832 | CB | THR B 208 | 67.569 | 27.520 | 14.589 | 1.00 | 24.45 | C |
| ATOM | 4833 | OG1 | THR B 208 | 68.271 | 27.992 | 15.760 | 1.00 | 25.33 | O |
| ATOM | 4834 | CG2 | THR B 208 | 66.623 | 28.622 | 14.083 | 1.00 | 25.31 | C |
| ATOM | 4835 | N | LEU B 209 | 66.328 | 25.442 | 12.692 | 1.00 | 23.65 | N |
| ATOM | 4836 | CA | LEU B 209 | 65.448 | 25.146 | 11.558 | 1.00 | 24.32 | C |
| ATOM | 4837 | C | LEU B 209 | 64.511 | 24.006 | 11.860 | 1.00 | 24.32 | C |
| ATOM | 4838 | O | LEU B 209 | 63.367 | 23.987 | 11.384 | 1.00 | 24.76 | O |
| ATOM | 4839 | CB | LEU B 209 | 66.253 | 24.833 | 10.273 | 1.00 | 23.01 | C |
| ATOM | 4840 | CG | LEU B 209 | 67.135 | 25.994 | 9.806 | 1.00 | 23.98 | C |
| ATOM | 4841 | CD1 | LEU B 209 | 68.238 | 25.452 | 8.851 | 1.00 | 23.64 | C |
| ATOM | 4842 | CD2 | LEU B 209 | 66.277 | 27.082 | 9.098 | 1.00 | 22.27 | C |
| ATOM | 4843 | N | THR B 210 | 64.994 | 23.046 | 12.635 | 1.00 | 24.52 | N |
| ATOM | 4844 | CA | THR B 210 | 64.148 | 21.902 | 12.996 | 1.00 | 24.84 | C |
| ATOM | 4845 | C | THR B 210 | 63.016 | 22.411 | 13.919 | 1.00 | 24.99 | C |
| ATOM | 4846 | O | THR B 210 | 61.859 | 21.995 | 13.793 | 1.00 | 25.75 | O |
| ATOM | 4847 | CB | THR B 210 | 65.005 | 20.814 | 13.712 | 1.00 | 24.72 | C |
| ATOM | 4848 | OG1 | THR B 210 | 65.982 | 20.332 | 12.773 | 1.00 | 25.20 | O |
| ATOM | 4849 | CG2 | THR B 210 | 64.134 | 19.628 | 14.187 | 1.00 | 23.85 | C |
| ATOM | 4850 | N | SER B 211 | 63.354 | 23.314 | 14.839 | 1.00 | 24.89 | N |
| ATOM | 4851 | CA | SER B 211 | 62.348 | 23.855 | 15.761 | 1.00 | 24.80 | C |
| ATOM | 4852 | C | SER B 211 | 61.293 | 24.683 | 14.991 | 1.00 | 24.46 | C |
| ATOM | 4853 | O | SER B 211 | 60.077 | 24.579 | 15.263 | 1.00 | 24.74 | O |
| ATOM | 4854 | CB | SER B 211 | 63.023 | 24.700 | 16.853 | 1.00 | 25.07 | C |
| ATOM | 4855 | OG | SER B 211 | 62.036 | 25.256 | 17.730 | 1.00 | 26.95 | O |
| ATOM | 4856 | N | ALA B 212 | 61.745 | 25.477 | 14.018 | 1.00 | 24.16 | N |
| ATOM | 4857 | CA | ALA B 212 | 60.849 | 26.282 | 13.181 | 1.00 | 23.99 | C |
| ATOM | 4858 | C | ALA B 212 | 59.905 | 25.367 | 12.398 | 1.00 | 24.64 | C |
| ATOM | 4859 | O | ALA B 212 | 58.703 | 25.659 | 12.246 | 1.00 | 24.61 | O |
| ATOM | 4860 | CB | ALA B 212 | 61.672 | 27.143 | 12.185 | 1.00 | 24.30 | C |
| ATOM | 4861 | N | ARG B 213 | 60.438 | 24.268 | 11.866 | 1.00 | 24.34 | N |
| ATOM | 4862 | CA | ARG B 213 | 59.560 | 23.352 | 11.113 | 1.00 | 24.64 | C |
| ATOM | 4863 | C | ARG B 213 | 58.571 | 22.704 | 12.092 | 1.00 | 24.15 | C |
| ATOM | 4864 | O | ARG B 213 | 57.387 | 22.566 | 11.782 | 1.00 | 24.86 | O |
| ATOM | 4865 | CB | ARG B 213 | 60.363 | 22.231 | 10.389 | 1.00 | 23.98 | C |
| ATOM | 4866 | CG | ARG B 213 | 59.450 | 21.326 | 9.533 | 1.00 | 25.23 | C |
| ATOM | 4867 | CD | ARG B 213 | 59.023 | 22.036 | 8.232 | 1.00 | 25.65 | C |
| ATOM | 4868 | NE | ARG B 213 | 60.154 | 22.121 | 7.287 | 1.00 | 26.91 | N |
| ATOM | 4869 | CZ | ARG B 213 | 60.173 | 22.889 | 6.196 | 1.00 | 28.49 | C |
| ATOM | 4870 | NH1 | ARG B 213 | 59.127 | 23.677 | 5.882 | 1.00 | 27.01 | N |
| ATOM | 4871 | NH2 | ARG B 213 | 61.240 | 22.848 | 5.382 | 1.00 | 29.13 | N |
| ATOM | 4872 | N | LEU B 214 | 59.055 | 22.305 | 13.266 | 1.00 | 23.71 | N |
| ATOM | 4873 | CA | LEU B 214 | 58.175 | 21.653 | 14.231 | 1.00 | 24.40 | C |
| ATOM | 4874 | C | LEU B 214 | 56.985 | 22.549 | 14.614 | 1.00 | 24.65 | C |
| ATOM | 4875 | O | LEU B 214 | 55.833 | 22.091 | 14.664 | 1.00 | 24.59 | O |
| ATOM | 4876 | CB | LEU B 214 | 58.947 | 21.264 | 15.514 | 1.00 | 24.16 | C |
| ATOM | 4877 | CG | LEU B 214 | 58.102 | 20.569 | 16.602 | 1.00 | 24.33 | C |
| ATOM | 4878 | CD1 | LEU B 214 | 57.567 | 19.219 | 16.108 | 1.00 | 25.03 | C |
| ATOM | 4879 | CD2 | LEU B 214 | 58.961 | 20.349 | 17.831 | 1.00 | 25.09 | C |
| ATOM | 4880 | N | ALA B 215 | 57.253 | 23.825 | 14.908 | 1.00 | 24.68 | N |
| ATOM | 4881 | CA | ALA B 215 | 56.155 | 24.744 | 15.278 | 1.00 | 23.26 | C |
| ATOM | 4882 | C | ALA B 215 | 55.131 | 24.846 | 14.157 | 1.00 | 23.43 | C |
| ATOM | 4883 | O | ALA B 215 | 53.926 | 24.912 | 14.410 | 1.00 | 23.85 | O |
| ATOM | 4884 | CB | ALA B 215 | 56.717 | 26.143 | 15.631 | 1.00 | 23.78 | C |
| ATOM | 4885 | N | ALA B 216 | 55.581 | 24.848 | 12.910 | 1.00 | 23.61 | N |
| ATOM | 4886 | CA | ALA B 216 | 54.628 | 24.928 | 11.785 | 1.00 | 23.49 | C |
| ATOM | 4887 | C | ALA B 216 | 53.800 | 23.634 | 11.698 | 1.00 | 24.05 | C |
| ATOM | 4888 | O | ALA B 216 | 52.578 | 23.685 | 11.493 | 1.00 | 24.02 | O |

| ATOM | 4889 | CB | ALA | B | 216 | 55.362 | 25.180 | 10.457 | 1.00 | 22.16 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4890 | N | ASP | B | 217 | 54.469 | 22.485 | 11.892 | 1.00 | 24.77 | N |
| ATOM | 4891 | CA | ASP | B | 217 | 53.790 | 21.195 | 11.867 | 1.00 | 24.96 | C |
| ATOM | 4892 | C | ASP | B | 217 | 52.762 | 21.125 | 13.001 | 1.00 | 24.76 | C |
| ATOM | 4893 | O | ASP | B | 217 | 51.614 | 20.767 | 12.775 | 1.00 | 24.52 | O |
| ATOM | 4894 | CB | ASP | B | 217 | 54.805 | 20.048 | 12.009 | 1.00 | 24.88 | C |
| ATOM | 4895 | CG | ASP | B | 217 | 55.636 | 19.828 | 10.719 | 1.00 | 24.59 | C |
| ATOM | 4896 | OD1 | ASP | B | 217 | 55.179 | 20.242 | 9.621 | 1.00 | 23.35 | O |
| ATOM | 4897 | OD2 | ASP | B | 217 | 56.729 | 19.224 | 10.815 | 1.00 | 25.56 | O |
| ATOM | 4898 | N | VAL | B | 218 | 53.156 | 21.503 | 14.209 | 1.00 | 24.44 | N |
| ATOM | 4899 | CA | VAL | B | 218 | 52.192 | 21.465 | 15.332 | 1.00 | 24.88 | C |
| ATOM | 4900 | C | VAL | B | 218 | 50.989 | 22.402 | 15.069 | 1.00 | 25.00 | C |
| ATOM | 4901 | O | VAL | B | 218 | 49.842 | 22.083 | 15.418 | 1.00 | 24.50 | O |
| ATOM | 4902 | CB | VAL | B | 218 | 52.917 | 21.839 | 16.656 | 1.00 | 24.77 | C |
| ATOM | 4903 | CG1 | VAL | B | 218 | 51.910 | 22.055 | 17.798 | 1.00 | 25.20 | C |
| ATOM | 4904 | CG2 | VAL | B | 218 | 53.947 | 20.734 | 17.007 | 1.00 | 24.92 | C |
| ATOM | 4905 | N | ALA | B | 219 | 51.259 | 23.537 | 14.416 | 1.00 | 24.48 | N |
| ATOM | 4906 | CA | ALA | B | 219 | 50.231 | 24.528 | 14.087 | 1.00 | 24.96 | C |
| ATOM | 4907 | C | ALA | B | 219 | 49.478 | 24.108 | 12.828 | 1.00 | 25.49 | C |
| ATOM | 4908 | O | ALA | B | 219 | 48.549 | 24.800 | 12.402 | 1.00 | 25.66 | O |
| ATOM | 4909 | CB | ALA | B | 219 | 50.871 | 25.921 | 13.876 | 1.00 | 23.73 | C |
| ATOM | 4910 | N | ASP | B | 220 | 49.921 | 23.006 | 12.208 | 1.00 | 25.79 | N |
| ATOM | 4911 | CA | ASP | B | 220 | 49.255 | 22.434 | 11.014 | 1.00 | 25.20 | C |
| ATOM | 4912 | C | ASP | B | 220 | 49.197 | 23.327 | 9.756 | 1.00 | 25.14 | C |
| ATOM | 4913 | O | ASP | B | 220 | 48.174 | 23.358 | 9.081 | 1.00 | 24.62 | O |
| ATOM | 4914 | CB | ASP | B | 220 | 47.824 | 21.973 | 11.415 | 1.00 | 26.47 | C |
| ATOM | 4915 | CG | ASP | B | 220 | 47.120 | 21.129 | 10.324 | 1.00 | 28.26 | C |
| ATOM | 4916 | OD1 | ASP | B | 220 | 47.815 | 20.394 | 9.621 | 1.00 | 28.79 | O |
| ATOM | 4917 | OD2 | ASP | B | 220 | 45.867 | 21.194 | 10.174 | 1.00 | 30.43 | O |
| ATOM | 4918 | N | VAL | B | 221 | 50.291 | 24.031 | 9.428 | 1.00 | 24.84 | N |
| ATOM | 4919 | CA | VAL | B | 221 | 50.322 | 24.898 | 8.236 | 1.00 | 24.25 | C |
| ATOM | 4920 | C | VAL | B | 221 | 51.670 | 24.661 | 7.570 | 1.00 | 23.79 | C |
| ATOM | 4921 | O | VAL | B | 221 | 52.669 | 24.446 | 8.247 | 1.00 | 23.63 | O |
| ATOM | 4922 | CB | VAL | B | 221 | 50.153 | 26.412 | 8.597 | 1.00 | 24.48 | C |
| ATOM | 4923 | CG1 | VAL | B | 221 | 48.716 | 26.683 | 9.045 | 1.00 | 23.70 | C |
| ATOM | 4924 | CG2 | VAL | B | 221 | 51.124 | 26.791 | 9.727 | 1.00 | 23.79 | C |
| ATOM | 4925 | N | PRO | B | 222 | 51.716 | 24.719 | 6.234 | 1.00 | 23.91 | N |
| ATOM | 4926 | CA | PRO | B | 222 | 52.933 | 24.481 | 5.455 | 1.00 | 24.01 | C |
| ATOM | 4927 | C | PRO | B | 222 | 53.888 | 25.684 | 5.291 | 1.00 | 24.56 | C |
| ATOM | 4928 | O | PRO | B | 222 | 54.400 | 25.969 | 4.192 | 1.00 | 23.46 | O |
| ATOM | 4929 | CB | PRO | B | 222 | 52.375 | 23.956 | 4.129 | 1.00 | 24.43 | C |
| ATOM | 4930 | CG | PRO | B | 222 | 51.132 | 24.815 | 3.923 | 1.00 | 25.02 | C |
| ATOM | 4931 | CD | PRO | B | 222 | 50.546 | 24.970 | 5.361 | 1.00 | 24.72 | C |
| ATOM | 4932 | N | THR | B | 223 | 54.158 | 26.359 | 6.412 | 1.00 | 24.14 | N |
| ATOM | 4933 | CA | THR | B | 223 | 55.009 | 27.551 | 6.396 | 1.00 | 23.31 | C |
| ATOM | 4934 | C | THR | B | 223 | 56.314 | 27.377 | 5.620 | 1.00 | 24.25 | C |
| ATOM | 4935 | O | THR | B | 223 | 56.996 | 26.354 | 5.741 | 1.00 | 24.71 | O |
| ATOM | 4936 | CB | THR | B | 223 | 55.341 | 27.993 | 7.850 | 1.00 | 22.04 | C |
| ATOM | 4937 | OG1 | THR | B | 223 | 54.139 | 27.964 | 8.641 | 1.00 | 21.84 | O |
| ATOM | 4938 | CG2 | THR | B | 223 | 55.961 | 29.429 | 7.851 | 1.00 | 19.55 | C |
| ATOM | 4939 | N | VAL | B | 224 | 56.684 | 28.388 | 4.834 | 1.00 | 24.70 | N |
| ATOM | 4940 | CA | VAL | B | 224 | 57.938 | 28.337 | 4.076 | 1.00 | 24.98 | C |
| ATOM | 4941 | C | VAL | B | 224 | 59.055 | 28.726 | 5.022 | 1.00 | 25.53 | C |
| ATOM | 4942 | O | VAL | B | 224 | 59.018 | 29.818 | 5.625 | 1.00 | 25.86 | O |
| ATOM | 4943 | CB | VAL | B | 224 | 57.866 | 29.293 | 2.880 | 1.00 | 25.69 | C |
| ATOM | 4944 | CG1 | VAL | B | 224 | 59.197 | 29.321 | 2.117 | 1.00 | 25.50 | C |
| ATOM | 4945 | CG2 | VAL | B | 224 | 56.714 | 28.831 | 1.963 | 1.00 | 23.83 | C |
| ATOM | 4946 | N | VAL | B | 225 | 60.033 | 27.826 | 5.180 | 1.00 | 24.75 | N |
| ATOM | 4947 | CA | VAL | B | 225 | 61.156 | 28.023 | 6.094 | 1.00 | 25.28 | C |
| ATOM | 4948 | C | VAL | B | 225 | 62.402 | 28.397 | 5.308 | 1.00 | 25.87 | C |
| ATOM | 4949 | O | VAL | B | 225 | 62.832 | 27.681 | 4.382 | 1.00 | 26.08 | O |
| ATOM | 4950 | CB | VAL | B | 225 | 61.402 | 26.724 | 6.938 | 1.00 | 25.10 | C |
| ATOM | 4951 | CG1 | VAL | B | 225 | 62.645 | 26.859 | 7.787 | 1.00 | 25.25 | C |
| ATOM | 4952 | CG2 | VAL | B | 225 | 60.208 | 26.454 | 7.852 | 1.00 | 24.77 | C |
| ATOM | 4953 | N | ILE | B | 226 | 62.995 | 29.528 | 5.666 | 1.00 | 25.86 | N |
| ATOM | 4954 | CA | ILE | B | 226 | 64.170 | 30.010 | 4.969 | 1.00 | 25.10 | C |
| ATOM | 4955 | C | ILE | B | 226 | 65.354 | 30.052 | 5.920 | 1.00 | 25.38 | C |
| ATOM | 4956 | O | ILE | B | 226 | 65.257 | 30.606 | 7.028 | 1.00 | 25.03 | O |
| ATOM | 4957 | CB | ILE | B | 226 | 63.911 | 31.430 | 4.441 | 1.00 | 26.86 | C |
| ATOM | 4958 | CG1 | ILE | B | 226 | 62.688 | 31.395 | 3.513 | 1.00 | 27.14 | C |
| ATOM | 4959 | CG2 | ILE | B | 226 | 65.182 | 31.979 | 3.744 | 1.00 | 26.21 | C |
| ATOM | 4960 | CD1 | ILE | B | 226 | 62.228 | 32.787 | 3.036 | 1.00 | 27.24 | C |
| ATOM | 4961 | N | ALA | B | 227 | 66.464 | 29.458 | 5.504 | 1.00 | 24.35 | N |
| ATOM | 4962 | CA | ALA | B | 227 | 67.677 | 29.458 | 6.312 | 1.00 | 25.33 | C |
| ATOM | 4963 | C | ALA | B | 227 | 68.653 | 30.512 | 5.769 | 1.00 | 25.80 | C |
| ATOM | 4964 | O | ALA | B | 227 | 68.941 | 30.565 | 4.568 | 1.00 | 26.56 | O |
| ATOM | 4965 | CB | ALA | B | 227 | 68.338 | 28.057 | 6.290 | 1.00 | 25.15 | C |
| ATOM | 4966 | N | ARG | B | 228 | 69.156 | 31.351 | 6.659 | 1.00 | 25.37 | N |
| ATOM | 4967 | CA | ARG | B | 228 | 70.110 | 32.390 | 6.280 | 1.00 | 25.37 | C |
| ATOM | 4968 | C | ARG | B | 228 | 71.449 | 32.094 | 6.953 | 1.00 | 25.06 | C |

| ATOM | 4969 | O   | ARG B 228 | 71.491 | 31.688 | 8.109  | 1.00 25.38 | O  |
|------|------|-----|-----------|--------|--------|--------|------------|----|
| ATOM | 4970 | CB  | ARG B 228 | 69.633 | 33.774 | 6.769  | 1.00 24.74 | C  |
| ATOM | 4971 | CG  | ARG B 228 | 70.774 | 34.794 | 6.924  | 1.00 25.07 | C  |
| ATOM | 4972 | CD  | ARG B 228 | 70.234 | 36.222 | 7.222  | 1.00 25.15 | C  |
| ATOM | 4973 | NE  | ARG B 228 | 71.247 | 37.045 | 7.893  | 1.00 25.79 | N  |
| ATOM | 4974 | CZ  | ARG B 228 | 71.111 | 38.340 | 8.145  | 1.00 26.89 | ·C |
| ATOM | 4975 | NH1 | ARG B 228 | 69.990 | 38.973 | 7.776  | 1.00 26.16 | N  |
| ATOM | 4976 | NH2 | ARG B 228 | 72.087 | 38.999 | 8.768  | 1.00 25.98 | N  |
| ATOM | 4977 | N   | THR B 229 | 72.541 | 32.266 | 6.226  | 1.00 25.54 | N  |
| ATOM | 4978 | CA  | THR B 229 | 73.843 | 32.073 | 6.830  | 1.00 25.80 | C  |
| ATOM | 4979 | C   | THR B 229 | 74.577 | 33.373 | 6.794  | 1.00 26.19 | C  |
| ATOM | 4980 | O   | THR B 229 | 74.540 | 34.092 | 5.782  | 1.00 26.78 | O  |
| ATOM | 4981 | CB  | THR B 229 | 74.740 | 30.977 | 6.158  | 1.00 26.46 | C  |
| ATOM | 4982 | OG1 | THR B 229 | 75.942 | 30.882 | 6.931  | 1.00 26.64 | O  |
| ATOM | 4983 | CG2 | THR B 229 | 75.135 | 31.333 | 4.707  | 1.00 27.27 | C  |
| ATOM | 4984 | N   | ASP B 230 | 75.241 | 33.671 | 7.904  | 1.00 26.18 | N  |
| ATOM | 4985 | CA  | ASP B 230 | 75.993 | 34.889 | 8.059  | 1.00 27.41 | C  |
| ATOM | 4986 | C   | ASP B 230 | 77.511 | 34.678 | 8.003  | 1.00 27.91·| C  |
| ATOM | 4987 | O   | ASP B 230 | 78.258 | 35.557 | 8.394  | 1.00 27.86 | O  |
| ATOM | 4988 | CB  | ASP B 230 | 75.639 | 35.528 | 9.397  | 1.00 28.19 | C  |
| ATOM | 4989 | CG  | ASP B 230 | 74.328 | 36.282 | 9.346  | 1.00 28.60 | C  |
| ATOM | 4990 | OD1 | ASP B 230 | 73.251 | 35.652 | 9.497  | 1.00 29.39 | O  |
| ATOM | 4991 | OD2 | ASP B 230 | 74.391 | 37.507 | 9.124  | 1.00 28.65 | O  |
| ATOM | 4992 | N   | ALA B 231 | 77.942 | 33.526 | 7.493  | 1.00 28.60 | N  |
| ATOM | 4993 | CA  | ALA B 231 | 79.369 | 33.167 | 7.431  | 1.00 29.97 | C  |
| ATOM | 4994 | C   | ALA B 231 | 80.205 | 33.981 | 6.441  | 1.00 31.20 | C  |
| ATOM | 4995 | O   | ALA B 231 | 81.437 | 33.887 | 6.451  | 1.00 31.58 | O  |
| ATOM | 4996 | CB  | ALA B 231 | 79.521 | 31.660 | 7.095  | 1.00 28.34 | C  |
| ATOM | 4997 | N   | GLU B 232 | 79.549 | 34.747 | 5.577  | 1.00 32.20 | N  |
| ATOM | 4998 | CA  | GLU B 232 | 80.286 | 35.523 | 4.606  | 1.00 33.64 | C  |
| ATOM | 4999 | C   | GLU B 232 | 81.182 | 36.546 | 5.281  | 1.00 33.50 | C  |
| ATOM | 5000 | O   | GLU B 232 | 82.341 | 36.687 | 4.890  | 1.00 33.87 | O  |
| ATOM | 5001 | CB  | GLU B 232 | 79.343 | 36.205 | 3.619  | 1.00 35.43 | C  |
| ATOM | 5002 | CG  | GLU B 232 | 80.030 | 36.550 | 2.312  | 1.00 38.37 | C  |
| ATOM | 5003 | CD  | GLU B 232 | 79.964 | 38.000 | 2.045  | 1.00 40.39 | C  |
| ATOM | 5004 | OE1 | GLU B 232 | 80.503 | 38.782 | 2.857  | 1.00 41.79 | O  |
| ATOM | 5005 | OE2 | GLU B 232 | 79.338 | 38.369 | 1.031  | 1.00 42.65 | O  |
| ATOM | 5006 | N   | ALA B 233 | 80.669 | 37.241 | 6.301  | 1.00 32.85 | N  |
| ATOM | 5007 | CA  | ALA B 233 | 81.457 | 38.243 | 7.007  | 1.00 32.07 | C  |
| ATOM | 5008 | C   | ALA B 233 | 81.802 | 37.879 | 8.444  | 1.00 32.38 | C  |
| ATOM | 5009 | O   | ALA B 233 | 82.724 | 38.460 | 9.018  | 1.00 33.52 | O  |
| ATOM | 5010 | CB  | ALA B 233 | 80.739 | 39.569 | 6.995  | 1.00 31.77 | C  |
| ATOM | 5011 | N   | ALA B 234 | 81.090 | 36.937 | 9.049  | 1.00 31.76 | N  |
| ATOM | 5012 | CA  | ALA B 234 | 81.386 | 36.604 | 10.452 | 1.00 31.94 | C  |
| ATOM | 5013 | C   | ALA B 234 | 82.834 | 36.111 | 10.607 | 1.00 32.35 | C  |
| ATOM | 5014 | O   | ALA B 234 | 83.317 | 35.292 | 9.825  | 1.00 32.30 | O  |
| ATOM | 5015 | CB  | ALA B 234 | 80.404 | 35.556 | 10.974 | 1.00 31.29 | C  |
| ATOM | 5016 | N   | THR B 235 | 83.501 | 36.610 | 11.637 | 1.00 32.93 | N  |
| ATOM | 5017 | CA  | THR B 235 | 84.894 | 36.282 | 11.885 | 1.00 33.83 | C  |
| ATOM | 5018 | C   | THR B 235 | 85.062 | 35.446 | 13.128 | 1.00 33.06 | C  |
| ATOM | 5019 | O   | THR B 235 | 86.169 | 35.005 | 13.439 | 1.00 33.43 | O  |
| ATOM | 5020 | CB  | THR B 235 | 85.662 | 37.561 | 12.082 | 1.00 34.76 | C  |
| ATOM | 5021 | OG1 | THR B 235 | 84.919 | 38.373 | 13.003 | 1.00 37.98 | O  |
| ATOM | 5022 | CG2 | THR B 235 | 85.781 | 38.321 | 10.761 | 1.00 36.58 | C  |
| ATOM | 5023 | N   | LEU B 236 | 83.957 | 35.216 | 13.828 | 1.00 32.16 | N  |
| ATOM | 5024 | CA  | LEU B 236 | 83.981 | 34.449 | 15.072 | 1.00 31.18 | C  |
| ATOM | 5025 | C   | LEU B 236 | 82.896 | 33.373 | 15.092 | 1.00 30.91 | C  |
| ATOM | 5026 | O   | LEU B 236 | 81.941 | 33.435 | 14.335 | 1.00 30.36 | O  |
| ATOM | 5027 | CB  | LEU B 236 | 83.776 | 35.425 | 16.244 | 1.00 31.06 | C  |
| ATOM | 5028 | CG  | LEU B 236 | 84.842 | 36.531 | 16.319 | 1.00 31.19 | C  |
| ATOM | 5029 | CD1 | LEU B 236 | 84.348 | 37.723 | 17.147 | 1.00 31.41 | C  |
| ATOM | 5030 | CD2 | LEU B 236 | 86.120 | 35.948 | 16.939 | 1.00 30.84 | C  |
| ATOM | 5031 | N   | ILE B 237 | 83.064 | 32.379 | 15.955 | 1.00 30.85 | N  |
| ATOM | 5032 | CA  | ILE B 237 | 82.076 | 31.327 | 16.132 | 1.00 30.68 | C  |
| ATOM | 5033 | C   | ILE B 237 | 82.154 | 30.994 | 17.625 | 1.00 31.45 | C  |
| ATOM | 5034 | O   | ILE B 237 | 83.240 | 31.064 | 18.220 | 1.00 31.87 | O  |
| ATOM | 5035 | CB  | ILE B 237 | 82.365 | 30.062 | 15.237 | 1.00 30.11 | C  |
| ATOM | 5036 | CG1 | ILE B 237 | 81.323 | 28.992 | 15.534 | 1.00 29.40 | C  |
| ATOM | 5037 | CG2 | ILE B 237 | 83.755 | 29.512 | 15.496 | 1.00 29.21 | C  |
| ATOM | 5038 | CD1 | ILE B 237 | 81.253 | 27.907 | 14.509 | 1.00 28.65 | C  |
| ATOM | 5039 | N   | THR B 238 | 81.016 | 30.674 | 18.246 | 1.00 31.21 | N  |
| ATOM | 5040 | CA  | THR B 238 | 80.985 | 30.379 | 19.679 | 1.00 31.50 | C  |
| ATOM | 5041 | C   | THR B 238 | 81.762 | 29.145 | 20.115 | 1.00 32.22 | C  |
| ATOM | 5042 | O   | THR B 238 | 82.379 | 29.145 | 21.166 | 1.00 33.29 | O  |
| ATOM | 5043 | CB  | THR B 238 | 79.539 | 30.168 | 20.182 | 1.00 31.13 | C  |
| ATOM | 5044 | OG1 | THR B 238 | 78.918 | 29.114 | 19.413 | 1.00 28.70 | O  |
| ATOM | 5045 | CG2 | THR B 238 | 78.736 | 31.453 | 20.049 | 1.00 29.63 | C  |
| ATOM | 5046 | N   | SER B 239 | 81.750 | 28.102 | 19.300 | 1.00 32.62 | N  |
| ATOM | 5047 | CA  | SER B·239 | 82.410 | 26.880 | 19.686 | 1.00 33.12 | C  |
| ATOM | 5048 | C   | SER B 239 | 82.974 | 26.139 | 18.473 | 1.00 33.40 | C  |

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ATOM   5049  O   SER B 239      82.511  26.332  17.337  1.00 33.51           O
ATOM   5050  CB  SER B 239      81.388  26.018  20.431  1.00 33.03           C
ATOM   5051  OG  SER B 239      81.820  24.697  20.620  1.00 34.06           O
ATOM   5052  N   ASP B 240      83.985  25.301  18.710  1.00 33.19           N
ATOM   5053  CA  ASP B 240      84.559  24.511  17.631  1.00 34.01           C
ATOM   5054  C   ASP B 240      84.028  23.069  17.734  1.00 34.04           C
ATOM   5055  O   ASP B 240      84.577  22.145  17.115  1.00 34.59           O
ATOM   5056  CB  ASP B 240      86.083  24.493  17.749  1.00 35.01           C
ATOM   5057  CG  ASP B 240      86.557  23.780  19.001  1.00 35.94           C
ATOM   5058  OD1 ASP B 240      85.724  23.330  19.831  1.00 37.62           O
ATOM   5059  OD2 ASP B 240      87.779  23.659  19.170  1.00 38.16           O
ATOM   5060  N   VAL B 241      82.969  22.871  18.513  1.00 33.52           N
ATOM   5061  CA  VAL B 241      82.423  21.538  18.700  1.00 33.83           C
ATOM   5062  C   VAL B 241      81.966  20.782  17.448  1.00 34.33           C
ATOM   5063  O   VAL B 241      82.111  19.554  17.379  1.00 34.26           O
ATOM   5064  CB  VAL B 241      81.225  21.555  19.685  1.00 34.72           C
ATOM   5065  CG1 VAL B 241      79.958  22.106  18.968  1.00 35.12           C
ATOM   5066  CG2 VAL B 241      80.967  20.158  20.204  1.00 34.05           C
ATOM   5067  N   ASP B 242      81.409  21.491  16.462  1.00 34.20           N
ATOM   5068  CA  ASP B 242      80.906  20.844  15.262  1.00 33.70           C
ATOM   5069  C   ASP B 242      82.030  20.579  14.261  1.00 34.35           C
ATOM   5070  O   ASP B 242      82.659  21.517  13.771  1.00 33.80           O
ATOM   5071  CB  ASP B 242      79.825  21.722  14.604  1.00 33.73           C
ATOM   5072  CG  ASP B 242      78.944  20.939  13.623  1.00 33.65           C
ATOM   5073  OD1 ASP B 242      79.501  20.273  12.729  1.00 33.23           O
ATOM   5074  OD2 ASP B 242      77.694  20.985  13.729  1.00 33.49           O
ATOM   5075  N   GLU B 243      82.268  19.318  13.933  1.00 34.98           N
ATOM   5076  CA  GLU B 243      83.347  19.013  13.002  1.00 36.49           C
ATOM   5077  C   GLU B 243      83.193  19.712  11.649  1.00 36.25           C
ATOM   5078  O   GLU B 243      84.192  19.962  10.968  1.00 36.23           O
ATOM   5079  CB  GLU B 243      83.474  17.499  12.808  1.00 38.80           C
ATOM   5080  CG  GLU B 243      83.608  16.741  14.126  1.00 42.92           C
ATOM   5081  CD  GLU B 243      84.352  15.410  13.969  1.00 45.77           C
ATOM   5082  OE1 GLU B 243      84.263  14.806  12.866  1.00 46.92           O
ATOM   5083  OE2 GLU B 243      85.018  14.978  14.955  1.00 47.31           O
ATOM   5084  N   ARG B 244      81.961  20.062  11.268  1.00 35.48           N
ATOM   5085  CA  ARG B 244      81.742  20.737   9.983  1.00 34.28           C
ATOM   5086  C   ARG B 244      82.271  22.167  10.018  1.00 34.17           C
ATOM   5087  O   ARG B 244      82.535  22.754   8.967  1.00 34.00           O
ATOM   5088  CB  ARG B 244      80.252  20.743   9.612  1.00 34.33           C
ATOM   5089  CG  ARG B 244      79.697  19.384   9.206  1.00 34.01           C
ATOM   5090  CD  ARG B 244      78.173  19.334   9.184  1.00 33.25           C
ATOM   5091  NE  ARG B 244      77.615  19.550  10.523  1.00 32.07           N
ATOM   5092  CZ  ARG B 244      76.383  19.219  10.896  1.00 31.97           C
ATOM   5093  NH1 ARG B 244      75.548  18.649  10.039  1.00 31.97           N
ATOM   5094  NH2 ARG B 244      75.985  19.460  12.136  1.00 31.61           N
ATOM   5095  N   ASP B 245      82.439  22.721  11.221  1.00 33.40           N
ATOM   5096  CA  ASP B 245      82.947  24.090  11.388  1.00 33.38           C
ATOM   5097  C   ASP B 245      84.462  24.134  11.617  1.00 33.88           C
ATOM   5098  O   ASP B 245      85.123  25.166  11.386  1.00 33.18           O
ATOM   5099  CB  ASP B 245      82.267  24.787  12.579  1.00 32.05           C
ATOM   5100  CG  ASP B 245      80.755  24.869  12.428  1.00 31.76           C
ATOM   5101  OD1 ASP B 245      80.242  25.058  11.294  1.00 31.45           O
ATOM   5102  OD2 ASP B 245      80.075  24.750  13.458  1.00 32.13           O
ATOM   5103  N   GLN B 246      85.011  23.014  12.078  1.00 34.28           N
ATOM   5104  CA  GLN B 246      86.442  22.956  12.346  1.00 35.43           C
ATOM   5105  C   GLN B 246      87.361  23.323  11.171  1.00 35.29           C
ATOM   5106  O   GLN B 246      88.367  24.000  11.369  1.00 36.17           O
ATOM   5107  CB  GLN B 246      86.778  21.589  12.946  1.00 36.13           C
ATOM   5108  CG  GLN B 246      86.134  21.424  14.327  1.00 37.73           C
ATOM   5109  CD  GLN B 246      86.332  20.036  14.906  1.00 39.12           C
ATOM   5110  OE1 GLN B 246      86.829  19.130  14.219  1.00 40.51           O
ATOM   5111  NE2 GLN B 246      85.941  19.851  16.161  1.00 38.54           N
ATOM   5112  N   PRO B 247      87.022  22.929   9.933  1.00 35.05           N
ATOM   5113  CA  PRO B 247      87.936  23.314   8.854  1.00 35.43           C
ATOM   5114  C   PRO B 247      88.247  24.822   8.776  1.00 36.31           C
ATOM   5115  O   PRO B 247      89.304  25.230   8.270  1.00 36.28           O
ATOM   5116  CB  PRO B 247      87.218  22.824   7.598  1.00 35.29           C
ATOM   5117  CG  PRO B 247      86.447  21.640   8.080  1.00 35.28           C
ATOM   5118  CD  PRO B 247      85.914  22.109   9.421  1.00 35.27           C
ATOM   5119  N   PHE B 248      87.347  25.659   9.288  1.00 35.72           N
ATOM   5120  CA  PHE B 248      87.550  27.096   9.194  1.00 35.80           C
ATOM   5121  C   PHE B 248      88.093  27.736  10.453  1.00 36.11           C
ATOM   5122  O   PHE B 248      88.424  28.907  10.428  1.00 36.54           O
ATOM   5123  CB  PHE B 248      86.219  27.764   8.798  1.00 35.64           C
ATOM   5124  CG  PHE B 248      85.599  27.162   7.576  1.00 35.21           C
ATOM   5125  CD1 PHE B 248      86.124  27.428   6.314  1.00 35.79           C
ATOM   5126  CD2 PHE B 248      84.538  26.275   7.683  1.00 35.06           C
ATOM   5127  CE1 PHE B 248      85.605  26.816   5.165  1.00 35.62           C
ATOM   5128  CE2 PHE B 248      84.007  25.649   6.534  1.00 35.50           C
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| ATOM | 5129 | CZ | PHE | B | 248 | 84.542 | 25.919 | 5.276 | 1.00 | 35.34 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5130 | N | ILE | B | 249 | 88.169 | 26.979 | 11.548 | 1.00 | 36.41 | N |
| ATOM | 5131 | CA | ILE | B | 249 | 88.670 | 27.496 | 12.816 | 1.00 | 37.87 | C |
| ATOM | 5132 | C | ILE | B | 249 | 90.180 | 27.681 | 12.737 | 1.00 | 39.09 | C |
| ATOM | 5133 | O | ILE | B | 249 | 90.883 | 26.742 | 12.356 | 1.00 | 39.59 | O |
| ATOM | 5134 | CB | ILE | B | 249 | 88.397 | 26.502 | 13.977 | 1.00 | 38.48 | C |
| ATOM | 5135 | CG1 | ILE | B | 249 | 86.900 | 26.200 | 14.076 | 1.00 | 38.36 | C |
| ATOM | 5136 | CG2 | ILE | B | 249 | 88.916 | 27.091 | 15.302 | 1.00 | 38.17 | C |
| ATOM | 5137 | CD1 | ILE | B | 249 | 86.103 | 27.359 | 14.544 | 1.00 | 38.33 | C |
| ATOM | 5138 | N | THR | B | 250 | 90.694 | 28.857 | 13.096 | 1.00 | 39.85 | N |
| ATOM | 5139 | CA | THR | B | 250 | 92.141 | 29.060 | 13.014 | 1.00 | 41.10 | C |
| ATOM | 5140 | C | THR | B | 250 | 92.834 | 28.521 | 14.253 | 1.00 | 41.85 | C |
| ATOM | 5141 | O | THR | B | 250 | 93.801 | 27.770 | 14.151 | 1.00 | 42.91 | O |
| ATOM | 5142 | CB | THR | B | 250 | 92.526 | 30.534 | 12.901 | 1.00 | 41.39 | C |
| ATOM | 5143 | OG1 | THR | B | 250 | 92.172 | 31.200 | 14.124 | 1.00 | 41.81 | O |
| ATOM | 5144 | CG2 | THR | B | 250 | 91.839 | 31.178 | 11.703 | 1.00 | 40.77 | C |
| ATOM | 5145 | N | GLY | B | 251 | 92.355 | 28.899 | 15.432 | 1.00 | 42.38 | N |
| ATOM | 5146 | CA | GLY | B | 251 | 92.980 | 28.402 | 16.647 | 1.00 | 42.37 | C |
| ATOM | 5147 | C | GLY | B | 251 | 92.972 | 29.494 | 17.682 | 1.00 | 42.67 | C |
| ATOM | 5148 | O | GLY | B | 251 | 92.796 | 29.228 | 18.874 | 1.00 | 43.43 | O |
| ATOM | 5149 | N | GLU | B | 252 | 93.179 | 30.726 | 17.232 | 1.00 | 42.45 | N |
| ATOM | 5150 | CA | GLU | B | 252 | 93.138 | 31.868 | 18.128 | 1.00 | 42.57 | C |
| ATOM | 5151 | C | GLU | B | 252 | 91.763 | 31.860 | 18.791 | 1.00 | 42.12 | C |
| ATOM | 5152 | O | GLU | B | 252 | 90.744 | 31.481 | 18.169 | 1.00 | 41.76 | O |
| ATOM | 5153 | CB | GLU | B | 252 | 93.296 | 33.160 | 17.337 | 1.00 | 44.25 | C |
| ATOM | 5154 | CG | GLU | B | 252 | 94.524 | 33.177 | 16.465 | 1.00 | 46.83 | C |
| ATOM | 5155 | CD | GLU | B | 252 | 94.301 | 33.938 | 15.153 | 1.00 | 49.00 | C |
| ATOM | 5156 | OE1 | GLU | B | 252 | 93.636 | 33.367 | 14.218 | 1.00 | 49.65 | O |
| ATOM | 5157 | OE2 | GLU | B | 252 | 94.790 | 35.109 | 15.069 | 1.00 | 50.10 | O |
| ATOM | 5158 | N | ARG | B | 253 | 91.735 | 32.270 | 20.050 | 1.00 | 41.32 | N |
| ATOM | 5159 | CA | ARG | B | 253 | 90.498 | 32.294 | 20.815 | 1.00 | 41.20 | C |
| ATOM | 5160 | C | ARG | B | 253 | 90.456 | 33.688 | 21.408 | 1.00 | 40.43 | C |
| ATOM | 5161 | O | ARG | B | 253 | 91.507 | 34.234 | 21.757 | 1.00 | 41.26 | O |
| ATOM | 5162 | CB | ARG | B | 253 | 90.564 | 31.231 | 21.911 | 1.00 | 41.67 | C |
| ATOM | 5163 | CG | ARG | B | 253 | 89.201 | 30.745 | 22.354 | 1.00 | 43.20 | C |
| ATOM | 5164 | CD | ARG | B | 253 | 89.105 | 29.252 | 22.215 | 1.00 | 43.52 | C |
| ATOM | 5165 | NE | ARG | B | 253 | 89.263 | 28.593 | 23.509 | 1.00 | 44.73 | N |
| ATOM | 5166 | CZ | ARG | B | 253 | 88.337 | 28.619 | 24.472 | 1.00 | 44.82 | C |
| ATOM | 5167 | NH1 | ARG | B | 253 | 87.197 | 29.268 | 24.264 | 1.00 | 44.67 | N |
| ATOM | 5168 | NH2 | ARG | B | 253 | 88.548 | 28.007 | 25.641 | 1.00 | 44.46 | N |
| ATOM | 5169 | N | THR | B | 254 | 89.274 | 34.283 | 21.514 | 1.00 | 39.11 | N |
| ATOM | 5170 | CA | THR | B | 254 | 89.174 | 35.623 | 22.057 | 1.00 | 38.01 | C |
| ATOM | 5171 | C | THR | B | 254 | 89.019 | 35.618 | 23.576 | 1.00 | 37.90 | C |
| ATOM | 5172 | O | THR | B | 254 | 88.879 | 34.565 | 24.195 | 1.00 | 37.85 | O |
| ATOM | 5173 | CB | THR | B | 254 | 87.982 | 36.369 | 21.452 | 1.00 | 38.01 | C |
| ATOM | 5174 | OG1 | THR | B | 254 | 86.765 | 35.842 | 21.996 | 1.00 | 38.19 | O |
| ATOM | 5175 | CG2 | THR | B | 254 | 87.977 | 36.211 | 19.971 | 1.00 | 37.22 | C |
| ATOM | 5176 | N | ARG | B | 255 | 89.053 | 36.811 | 24.157 | 1.00 | 38.00 | N |
| ATOM | 5177 | CA | ARG | B | 255 | 88.916 | 37.003 | 25.601 | 1.00 | 38.86 | C |
| ATOM | 5178 | C | ARG | B | 255 | 87.574 | 36.471 | 26.101 | 1.00 | 37.95 | C |
| ATOM | 5179 | O | ARG | B | 255 | 87.437 | 36.044 | 27.248 | 1.00 | 37.66 | O |
| ATOM | 5180 | CB | ARG | B | 255 | 89.015 | 38.499 | 25.930 | 1.00 | 40.55 | C |
| ATOM | 5181 | CG | ARG | B | 255 | 90.422 | 39.004 | 25.991 | 1.00 | 44.50 | C |
| ATOM | 5182 | CD | ARG | B | 255 | 91.155 | 38.315 | 27.157 | 1.00 | 47.20 | C |
| ATOM | 5183 | NE | ARG | B | 255 | 92.531 | 37.899 | 26.834 | 1.00 | 49.60 | N |
| ATOM | 5184 | CZ | ARG | B | 255 | 93.271 | 37.091 | 27.610 | 1.00 | 50.69 | C |
| ATOM | 5185 | NH1 | ARG | B | 255 | 92.765 | 36.614 | 28.757 | 1.00 | 50.70 | N |
| ATOM | 5186 | NH2 | ARG | B | 255 | 94.513 | 36.743 | 27.235 | 1.00 | 50.97 | N |
| ATOM | 5187 | N | GLU | B | 256 | 86.580 | 36.512 | 25.227 | 1.00 | 37.58 | N |
| ATOM | 5188 | CA | GLU | B | 256 | 85.236 | 36.045 | 25.580 | 1.00 | 37.66 | C |
| ATOM | 5189 | C | GLU | B | 256 | 85.193 | 34.557 | 25.429 | 1.00 | 36.93 | C |
| ATOM | 5190 | O | GLU | B | 256 | 84.207 | 33.917 | 25.795 | 1.00 | 37.22 | O |
| ATOM | 5191 | CB | GLU | B | 256 | 84.190 | 36.653 | 24.643 | 1.00 | 38.26 | C |
| ATOM | 5192 | CG | GLU | B | 256 | 84.043 | 38.165 | 24.770 | 1.00 | 40.41 | C |
| ATOM | 5193 | CD | GLU | B | 256 | 85.031 | 38.950 | 23.916 | 1.00 | 41.67 | C |
| ATOM | 5194 | OE1 | GLU | B | 256 | 85.628 | 38.378 | 22.972 | 1.00 | 43.36 | O |
| ATOM | 5195 | OE2 | GLU | B | 256 | 85.190 | 40.159 | 24.181 | 1.00 | 43.77 | O |
| ATOM | 5196 | N | GLY | B | 257 | 86.260 | 34.007 | 24.854 | 1.00 | 36.19 | N |
| ATOM | 5197 | CA | GLY | B | 257 | 86.310 | 32.578 | 24.634 | 1.00 | 35.49 | C |
| ATOM | 5198 | C | GLY | B | 257 | 85.783 | 32.150 | 23.274 | 1.00 | 35.60 | C |
| ATOM | 5199 | O | GLY | B | 257 | 85.610 | 30.965 | 23.049 | 1.00 | 36.23 | O |
| ATOM | 5200 | N | PHE | B | 258 | 85.520 | 33.074 | 22.358 | 1.00 | 35.46 | N |
| ATOM | 5201 | CA | PHE | B | 258 | 85.031 | 32.638 | 21.056 | 1.00 | 35.79 | C |
| ATOM | 5202 | C | PHE | B | 258 | 86.219 | 32.162 | 20.205 | 1.00 | 35.63 | C |
| ATOM | 5203 | O | PHE | B | 258 | 87.377 | 32.378 | 20.559 | 1.00 | 35.76 | O |
| ATOM | 5204 | CB | PHE | B | 258 | 84.308 | 33.770 | 20.337 | 1.00 | 36.64 | C |
| ATOM | 5205 | CG | PHE | B | 258 | 83.166 | 34.354 | 21.116 | 1.00 | 37.70 | C |
| ATOM | 5206 | CD1 | PHE | B | 258 | 82.283 | 33.533 | 21.797 | 1.00 | 38.05 | C |
| ATOM | 5207 | CD2 | PHE | B | 258 | 82.960 | 35.733 | 21.130 | 1.00 | 37.92 | C |
| ATOM | 5208 | CE1 | PHE | B | 258 | 81.197 | 34.085 | 22.490 | 1.00 | 39.31 | C |

| ATOM | 5209 | CE2 | PHE | B | 258 | 81.888 | 36.295 | 21.811 | 1.00 | 38.44 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5210 | CZ | PHE | B | 258 | 81.003 | 35.486 | 22.489 | 1.00 | 38.58 | C |
| ATOM | 5211 | N | TYR | B | 259 | 85.923 | 31.508 | 19.091 | 1.00 | 35.73 | N |
| ATOM | 5212 | CA | TYR | B | 259 | 86.957 | 31.002 | 18.202 | 1.00 | 35.66 | C |
| ATOM | 5213 | C | TYR | B | 259 | 86.985 | 31.803 | 16.918 | 1.00 | 35.95 | C |
| ATOM | 5214 | O | TYR | B | 259 | 85.936 | 32.054 | 16.320 | 1.00 | 35.70 | O |
| ATOM | 5215 | CB | TYR | B | 259 | 86.692 | 29.538 | 17.841 | 1.00 | 35.61 | C |
| ATOM | 5216 | CG | TYR | B | 259 | 86.758 | 28.581 | 19.008 | 1.00 | 36.63 | C |
| ATOM | 5217 | CD1 | TYR | B | 259 | 85.748 | 28.540 | 19.964 | 1.00 | 36.45 | C |
| ATOM | 5218 | CD2 | TYR | B | 259 | 87.869 | 27.753 | 19.187 | 1.00 | 36.67 | C |
| ATOM | 5219 | CE1 | TYR | B | 259 | 85.844 | 27.704 | 21.080 | 1.00 | 36.74 | C |
| ATOM | 5220 | CE2 | TYR | B | 259 | 87.978 | 26.914 | 20.294 | 1.00 | 36.82 | C |
| ATOM | 5221 | CZ | TYR | B | 259 | 86.968 | 26.895 | 21.237 | 1.00 | 37.03 | C |
| ATOM | 5222 | OH | TYR | B | 259 | 87.091 | 26.080 | 22.345 | 1.00 | 37.72 | O |
| ATOM | 5223 | N | ARG | B | 260 | 88.179 | 32.193 | 16.481 | 1.00 | 36.25 | N |
| ATOM | 5224 | CA | ARG | B | 260 | 88.308 | 32.916 | 15.216 | 1.00 | 36.85 | C |
| ATOM | 5225 | C | ARG | B | 260 | 88.073 | 31.905 | 14.100 | 1.00 | 36.22 | C |
| ATOM | 5226 | O | ARG | B | 260 | 88.481 | 30.744 | 14.197 | 1.00 | 35.48 | O |
| ATOM | 5227 | CB | ARG | B | 260 | 89.688 | 33.579 | 15.118 | 1.00 | 38.77 | C |
| ATOM | 5228 | CG | ARG | B | 260 | 89.704 | 34.839 | 15.973 | 1.00 | 41.66 | C |
| ATOM | 5229 | CD | ARG | B | 260 | 90.947 | 35.690 | 15.864 | 1.00 | 44.04 | C |
| ATOM | 5230 | NE | ARG | B | 260 | 90.804 | 36.875 | 16.714 | 1.00 | 46.60 | N |
| ATOM | 5231 | CZ | ARG | B | 260 | 89.907 | 37.851 | 16.505 | 1.00 | 47.63 | C |
| ATOM | 5232 | NH1 | ARG | B | 260 | 89.065 | 37.796 | 15.464 | 1.00 | 48.09 | N |
| ATOM | 5233 | NH2 | ARG | B | 260 | 89.847 | 38.887 | 17.336 | 1.00 | 48.23 | N |
| ATOM | 5234 | N | THR | B | 261 | 87.382 | 32.336 | 13.052 | 1.00 | 35.33 | N |
| ATOM | 5235 | CA | THR | B | 261 | 87.049 | 31.435 | 11.977 | 1.00 | 35.68 | C |
| ATOM | 5236 | C | THR | B | 261 | 87.210 | 32.157 | 10.646 | 1.00 | 35.88 | C |
| ATOM | 5237 | O | THR | B | 261 | 86.920 | 33.354 | 10.552 | 1.00 | 35.50 | O |
| ATOM | 5238 | CB | THR | B | 261 | 85.587 | 30.917 | 12.174 | 1.00 | 35.60 | C |
| ATOM | 5239 | OG1 | THR | B | 261 | 85.266 | 29.960 | 11.159 | 1.00 | 35.99 | O |
| ATOM | 5240 | CG2 | THR | B | 261 | 84.602 | 32.060 | 12.102 | 1.00 | 35.81 | C |
| ATOM | 5241 | N | LYS | B | 262 | 87.690 | 31.449 | 9.622 | 1.00 | 36.41 | N |
| ATOM | 5242 | CA | LYS | B | 262 | 87.896 | 32.063 | 8.301 | 1.00 | 37.46 | C |
| ATOM | 5243 | C | LYS | B | 262 | 86.568 | 32.288 | 7.579 | 1.00 | 37.08 | C |
| ATOM | 5244 | O | LYS | B | 262 | 85.869 | 31.338 | 7.255 | 1.00 | 36.31 | O |
| ATOM | 5245 | CB | LYS | B | 262 | 88.777 | 31.176 | 7.414 | 1.00 | 39.57 | C |
| ATOM | 5246 | CG | LYS | B | 262 | 90.136 | 30.805 | 8.012 | 1.00 | 43.35 | C |
| ATOM | 5247 | CD | LYS | B | 262 | 91.053 | 30.190 | 6.932 | 1.00 | 45.74 | C |
| ATOM | 5248 | CE | LYS | B | 262 | 90.453 | 28.938 | 6.247 | 1.00 | 47.60 | C |
| ATOM | 5249 | NZ | LYS | B | 262 | 90.562 | 27.700 | 7.099 | 1.00 | 48.76 | N |
| ATOM | 5250 | N | ASN | B | 263 | 86.252 | 33.542 | 7.286 | 1.00 | 37.36 | N |
| ATOM | 5251 | CA | ASN | B | 263 | 84.985 | 33.869 | 6.643 | 1.00 | 37.59 | C |
| ATOM | 5252 | C | ASN | B | 263 | 85.036 | 33.803 | 5.128 | 1.00 | 37.83 | C |
| ATOM | 5253 | O | ASN | B | 263 | 86.072 | 33.476 | 4.541 | 1.00 | 38.43 | O |
| ATOM | 5254 | CB | ASN | B | 263 | 84.563 | 35.256 | 7.081 | 1.00 | 38.63 | C |
| ATOM | 5255 | CG | ASN | B | 263 | 85.587 | 36.293 | 6.722 | 1.00 | 39.98 | C |
| ATOM | 5256 | OD1 | ASN | B | 263 | 85.494 | 36.926 | 5.682 | 1.00 | 40.60 | O |
| ATOM | 5257 | ND2 | ASN | B | 263 | 86.597 | 36.448 | 7.569 | 1.00 | 41.18 | N |
| ATOM | 5258 | N | GLY | B | 264 | 83.910 | 34.088 | 4.482 | 1.00 | 36.59 | N |
| ATOM | 5259 | CA | GLY | B | 264 | 83.913 | 34.044 | 3.044 | 1.00 | 36.13 | C |
| ATOM | 5260 | C | GLY | B | 264 | 82.864 | 33.132 | 2.472 | 1.00 | 35.72 | C |
| ATOM | 5261 | O | GLY | B | 264 | 81.996 | 32.617 | 3.173 | 1.00 | 35.41 | O |
| ATOM | 5262 | N | ILE | B | 265 | 82.969 | 32.900 | 1.176 | 1.00 | 35.32 | N |
| ATOM | 5263 | CA | ILE | B | 265 | 81.985 | 32.088 | 0.501 | 1.00 | 35.06 | C |
| ATOM | 5264 | C | ILE | B | 265 | 82.113 | 30.617 | 0.793 | 1.00 | 35.37 | C |
| ATOM | 5265 | O | ILE | B | 265 | 81.117 | 29.868 | 0.764 | 1.00 | 35.22 | O |
| ATOM | 5266 | CB | ILE | B | 265 | 82.040 | 32.317 | -1.012 | 1.00 | 35.07 | C |
| ATOM | 5267 | CG1 | ILE | B | 265 | 80.777 | 31.731 | -1.648 | 1.00 | 34.90 | C |
| ATOM | 5268 | CG2 | ILE | B | 265 | 83.317 | 31.685 | -1.604 | 1.00 | 35.09 | C |
| ATOM | 5269 | CD1 | ILE | B | 265 | 80.662 | 32.060 | -3.077 | 1.00 | 35.14 | C |
| ATOM | 5270 | N | GLU | B | 266 | 83.328 | 30.181 | 1.103 | 1.00 | 35.05 | N |
| ATOM | 5271 | CA | GLU | B | 266 | 83.505 | 28.767 | 1.358 | 1.00 | 35.21 | C |
| ATOM | 5272 | C | GLU | B | 266 | 82.631 | 28.251 | 2.505 | 1.00 | 33.44 | C |
| ATOM | 5273 | O | GLU | B | 266 | 81.900 | 27.284 | 2.330 | 1.00 | 33.82 | O |
| ATOM | 5274 | CB | GLU | B | 266 | 84.970 | 28.455 | 1.630 | 1.00 | 37.38 | C |
| ATOM | 5275 | CG | GLU | B | 266 | 85.305 | 27.014 | 1.276 | 1.00 | 41.50 | C |
| ATOM | 5276 | CD | GLU | B | 266 | 86.786 | 26.714 | 1.458 | 1.00 | 43.85 | C |
| ATOM | 5277 | OE1 | GLU | B | 266 | 87.614 | 27.492 | 0.910 | 1.00 | 45.41 | O |
| ATOM | 5278 | OE2 | GLU | B | 266 | 87.105 | 25.708 | 2.143 | 1.00 | 45.27 | O |
| ATOM | 5279 | N | PRO | B | 267 | 82.734 | 28.852 | 3.708 | 1.00 | 32.40 | N |
| ATOM | 5280 | CA | PRO | B | 267 | 81.897 | 28.393 | 4.832 | 1.00 | 31.51 | C |
| ATOM | 5281 | C | PRO | B | 267 | 80.382 | 28.573 | 4.525 | 1.00 | 30.69 | C |
| ATOM | 5282 | O | PRO | B | 267 | 79.562 | 27.790 | 4.992 | 1.00 | 30.64 | O |
| ATOM | 5283 | CB | PRO | B | 267 | 82.375 | 29.265 | 6.000 | 1.00 | 31.82 | C |
| ATOM | 5284 | CG | PRO | B | 267 | 82.870 | 30.524 | 5.316 | 1.00 | 31.97 | C |
| ATOM | 5285 | CD | PRO | B | 267 | 83.613 | 29.957 | 4.129 | 1.00 | 31.51 | C |
| ATOM | 5286 | N | CYS | B | 268 | 80.012 | 29.590 | 3.740 | 1.00 | 30.17 | N |
| ATOM | 5287 | CA | CYS | B | 268 | 78.589 | 29.777 | 3.378 | 1.00 | 29.56 | C |
| ATOM | 5288 | C | CYS | B | 268 | 78.070 | 28.608 | 2.562 | 1.00 | 29.65 | C |

| ATOM | 5289 | O | CYS | B | 268 | 76.946 | 28.122 | 2.776 | 1.00 | 29.16 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5290 | CB | CYS | B | 268 | 78.383 | 31.032 | 2.547 | 1.00 | 29.78 | C |
| ATOM | 5291 | SG | CYS | B | 268 | 78.695 | 32.548 | 3.448 | 1.00 | 30.80 | S |
| ATOM | 5292 | N | ILE | B | 269 | 78.891 | 28.149 | 1.621 | 1.00 | 29.37 | N |
| ATOM | 5293 | CA | ILE | B | 269 | 78.495 | 27.031 | 0.764 | 1.00 | 29.38 | C |
| ATOM | 5294 | C | ILE | B | 269 | 78.356 | 25.776 | 1.616 | 1.00 | 29.12 | C |
| ATOM | 5295 | O | ILE | B | 269 | 77.367 | 25.057 | 1.517 | 1.00 | 29.42 | O |
| ATOM | 5296 | CB | ILE | B | 269 | 79.544 | 26.833 | -0.365 | 1.00 | 29.65 | C |
| ATOM | 5297 | CG1 | ILE | B | 269 | 79.412 | 27.976 | -1.377 | 1.00 | 29.10 | C |
| ATOM | 5298 | CG2 | ILE | B | 269 | 79.389 | 25.453 | -1.000 | 1.00 | 29.83 | C |
| ATOM | 5299 | CD1 | ILE | B | 269 | 80.474 | 27.970 | -2.479 | 1.00 | 30.08 | C |
| ATOM | 5300 | N | ALA | B | 270 | 79.331 | 25.535 | 2.482 | 1.00 | 29.15 | N |
| ATOM | 5301 | CA | ALA | B | 270 | 79.287 | 24.373 | 3.353 | 1.00 | 29.05 | C |
| ATOM | 5302 | C | ALA | B | 270 | 78.056 | 24.403 | 4.283 | 1.00 | 29.08 | C |
| ATOM | 5303 | O | ALA | B | 270 | 77.347 | 23.418 | 4.417 | 1.00 | 28.14 | O |
| ATOM | 5304 | CB | ALA | B | 270 | 80.552 | 24.308 | 4.186 | 1.00 | 29.44 | C |
| ATOM | 5305 | N | ARG | B | 271 | 77.811 | 25.538 | 4.930 | 1.00 | 29.45 | N |
| ATOM | 5306 | CA | ARG | B | 271 | 76.653 | 25.624 | 5.827 | 1.00 | 28.83 | C |
| ATOM | 5307 | C | ARG | B | 271 | 75.376 | 25.492 | 5.022 | 1.00 | 28.43 | C |
| ATOM | 5308 | O | ARG | B | 271 | 74.415 | 24.852 | 5.463 | 1.00 | 28.19 | O |
| ATOM | 5309 | CB | ARG | B | 271 | 76.688 | 26.947 | 6.614 | 1.00 | 28.84 | C |
| ATOM | 5310 | CG | ARG | B | 271 | 77.755 | 26.918 | 7.681 | 1.00 | 30.09 | C |
| ATOM | 5311 | CD | ARG | B | 271 | 77.726 | 28.117 | 8.582 | 1.00 | 31.58 | C |
| ATOM | 5312 | NE | ARG | B | 271 | 78.609 | 27.915 | 9.732 | 1.00 | 31.28 | N |
| ATOM | 5313 | CZ | ARG | B | 271 | 78.250 | 28.123 | 10.999 | 1.00 | 32.47 | C |
| ATOM | 5314 | NH1 | ARG | B | 271 | 77.011 | 28.555 | 11.293 | 1.00 | 32.13 | N |
| ATOM | 5315 | NH2 | ARG | B | 271 | 79.116 | 27.878 | 11.982 | 1.00 | 31.12 | N |
| ATOM | 5316 | N | ALA | B | 272 | 75.362 | 26.085 | 3.831 | 1.00 | 28.61 | N |
| ATOM | 5317 | CA | ALA | B | 272 | 74.185 | 26.007 | 2.988 | 1.00 | 29.15 | C |
| ATOM | 5318 | C | ALA | B | 272 | 73.873 | 24.550 | 2.656 | 1.00 | 29.58 | C |
| ATOM | 5319 | O | ALA | B | 272 | 72.707 | 24.160 | 2.696 | 1.00 | 28.83 | O |
| ATOM | 5320 | CB | ALA | B | 272 | 74.378 | 26.817 | 1.700 | 1.00 | 29.44 | C |
| ATOM | 5321 | N | LYS | B | 273 | 74.898 | 23.730 | 2.369 | 1.00 | 29.35 | N |
| ATOM | 5322 | CA | LYS | B | 273 | 74.630 | 22.327 | 2.050 | 1.00 | 30.47 | C |
| ATOM | 5323 | C | LYS | B | 273 | 74.124 | 21.591 | 3.308 | 1.00 | 30.28 | C |
| ATOM | 5324 | O | LYS | B | 273 | 73.233 | 20.754 | 3.225 | 1.00 | 31.11 | O |
| ATOM | 5325 | CB | LYS | B | 273 | 75.898 | 21.627 | 1.514 | 1.00 | 32.00 | C |
| ATOM | 5326 | CG | LYS | B | 273 | 76.513 | 22.247 | 0.275 | 1.00 | 33.19 | C |
| ATOM | 5327 | CD | LYS | B | 273 | 77.787 | 21.445 | -0.154 | 1.00 | 35.30 | C |
| ATOM | 5328 | CE | LYS | B | 273 | 78.368 | 21.972 | -1.459 | 1.00 | 36.45 | C |
| ATOM | 5329 | NZ | LYS | B | 273 | 79.805 | 21.636 | -1.649 | 1.00 | 37.35 | N |
| ATOM | 5330 | N | ALA | B | 274 | 74.686 | 21.904 | 4.470 | 1.00 | 29.68 | N |
| ATOM | 5331 | CA | ALA | B | 274 | 74.239 | 21.268 | 5.714 | 1.00 | 29.63 | C |
| ATOM | 5332 | C | ALA | B | 274 | 72.791 | 21.683 | 6.043 | 1.00 | 29.63 | C |
| ATOM | 5333 | O | ALA | B | 274 | 72.027 | 20.904 | 6.648 | 1.00 | 29.07 | O |
| ATOM | 5334 | CB | ALA | B | 274 | 75.180 | 21.669 | 6.896 | 1.00 | 29.53 | C |
| ATOM | 5335 | N | TYR | B | 275 | 72.402 | 22.897 | 5.638 | 1.00 | 28.85 | N |
| ATOM | 5336 | CA | TYR | B | 275 | 71.053 | 23.387 | 5.942 | 1.00 | 28.30 | C |
| ATOM | 5337 | C | TYR | B | 275 | 69.975 | 22.973 | 4.955 | 1.00 | 28.20 | C |
| ATOM | 5338 | O | TYR | B | 275 | 68.796 | 22.948 | 5.292 | 1.00 | 28.27 | O |
| ATOM | 5339 | CB | TYR | B | 275 | 71.023 | 24.924 | 6.004 | 1.00 | 27.58 | C |
| ATOM | 5340 | CG | TYR | B | 275 | 71.918 | 25.553 | 7.024 | 1.00 | 26.07 | C |
| ATOM | 5341 | CD1 | TYR | B | 275 | 72.327 | 24.859 | 8.159 | 1.00 | 26.33 | C |
| ATOM | 5342 | CD2 | TYR | B | 275 | 72.344 | 26.867 | 6.863 | 1.00 | 26.33 | C |
| ATOM | 5343 | CE1 | TYR | B | 275 | 73.166 | 25.474 | 9.112 | 1.00 | 26.84 | C |
| ATOM | 5344 | CE2 | TYR | B | 275 | 73.155 | 27.491 | 7.793 | 1.00 | 26.44 | C |
| ATOM | 5345 | CZ | TYR | B | 275 | 73.572 | 26.794 | 8.911 | 1.00 | 26.43 | C |
| ATOM | 5346 | OH | TYR | B | 275 | 74.411 | 27.432 | 9.793 | 1.00 | 27.43 | O |
| ATOM | 5347 | N | ALA | B | 276 | 70.379 | 22.648 | 3.739 | 1.00 | 28.03 | N |
| ATOM | 5348 | CA | ALA | B | 276 | 69.435 | 22.307 | 2.698 | 1.00 | 28.39 | C |
| ATOM | 5349 | C | ALA | B | 276 | 68.335 | 21.304 | 3.014 | 1.00 | 28.56 | C |
| ATOM | 5350 | O | ALA | B | 276 | 67.179 | 21.509 | 2.612 | 1.00 | 28.56 | O |
| ATOM | 5351 | CB | ALA | B | 276 | 70.201 | 21.869 | 1.413 | 1.00 | 29.03 | C |
| ATOM | 5352 | N | PRO | B | 277 | 68.650 | 20.216 | 3.730 | 1.00 | 28.66 | N |
| ATOM | 5353 | CA | PRO | B | 277 | 67.533 | 19.282 | 3.994 | 1.00 | 29.14 | C |
| ATOM | 5354 | C | PRO | B | 277 | 66.513 | 19.858 | 4.989 | 1.00 | 29.61 | C |
| ATOM | 5355 | O | PRO | B | 277 | 65.429 | 19.283 | 5.199 | 1.00 | 28.96 | O |
| ATOM | 5356 | CB | PRO | B | 277 | 68.230 | 18.045 | 4.591 | 1.00 | 29.54 | C |
| ATOM | 5357 | CG | PRO | B | 277 | 69.667 | 18.164 | 4.114 | 1.00 | 29.08 | C |
| ATOM | 5358 | CD | PRO | B | 277 | 69.930 | 19.664 | 4.213 | 1.00 | 28.80 | C |
| ATOM | 5359 | N | PHE | B | 278 | 66.874 | 20.998 | 5.583 | 1.00 | 29.68 | N |
| ATOM | 5360 | CA | PHE | B | 278 | 66.039 | 21.636 | 6.596 | 1.00 | 29.63 | C |
| ATOM | 5361 | C | PHE | B | 278 | 65.486 | 22.983 | 6.204 | 1.00 | 30.07 | C |
| ATOM | 5362 | O | PHE | B | 278 | 64.911 | 23.682 | 7.045 | 1.00 | 31.17 | O |
| ATOM | 5363 | CB | PHE | B | 278 | 66.853 | 21.777 | 7.864 | 1.00 | 29.33 | C |
| ATOM | 5364 | CG | PHE | B | 278 | 67.433 | 20.477 | 8.334 | 1.00 | 29.74 | C |
| ATOM | 5365 | CD1 | PHE | B | 278 | 66.656 | 19.583 | 9.081 | 1.00 | 29.52 | C |
| ATOM | 5366 | CD2 | PHE | B | 278 | 68.758 | 20.141 | 8.022 | 1.00 | 29.44 | C |
| ATOM | 5367 | CE1 | PHE | B | 278 | 67.195 | 18.363 | 9.523 | 1.00 | 30.41 | C |
| ATOM | 5368 | CE2 | PHE | B | 278 | 69.308 | 18.931 | 8.455 | 1.00 | 29.48 | C |

| ATOM | 5369 | CZ | PHE | B | 278 | 68.536 | 18.041 | 9.206 | 1.00 | 29.95 | C |
|------|------|-----|-----|---|-----|--------|--------|-------|------|-------|---|
| ATOM | 5370 | N | ALA | B | 279 | 65.613 | 23.352 | 4.940 | 1.00 | 30.04 | N |
| ATOM | 5371 | CA | ALA | B | 279 | 65.127 | 24.668 | 4.523 | 1.00 | 29.54 | C |
| ATOM | 5372 | C | ALA | B | 279 | 64.467 | 24.668 | 3.153 | 1.00 | 29.39 | C |
| ATOM | 5373 | O | ALA | B | 279 | 64.971 | 24.034 | 2.215 | 1.00 | 28.66 | O |
| ATOM | 5374 | CB | ALA | B | 279 | 66.297 | 25.651 | 4.532 | 1.00 | 29.94 | C |
| ATOM | 5375 | N | ASP | B | 280 | 63.351 | 25.383 | 3.019 | 1.00 | 28.28 | N |
| ATOM | 5376 | CA | ASP | B | 280 | 62.702 | 25.476 | 1.723 | 1.00 | 28.02 | C |
| ATOM | 5377 | C | ASP | B | 280 | 63.508 | 26.435 | 0.816 | 1.00 | 28.73 | C |
| ATOM | 5378 | O | ASP | B | 280 | 63.477 | 26.313 | -0.400 | 1.00 | 27.72 | O |
| ATOM | 5379 | CB | ASP | B | 280 | 61.272 | 25.965 | 1.871 | 1.00 | 27.58 | C |
| ATOM | 5380 | CG | ASP | B | 280 | 60.417 | 25.018 | 2.709 | 1.00 | 28.89 | C |
| ATOM | 5381 | OD1 | ASP | B | 280 | 60.453 | 23.777 | 2.456 | 1.00 | 27.08 | O |
| ATOM | 5382 | OD2 | ASP | B | 280 | 59.711 | 25.516 | 3.621 | 1.00 | 26.78 | O |
| ATOM | 5383 | N | LEU | B | 281 | 64.223 | 27.387 | 1.426 | 1.00 | 28.86 | N |
| ATOM | 5384 | CA | LEU | B | 281 | 65.065 | 28.325 | 0.672 | 1.00 | 28.80 | C |
| ATOM | 5385 | C | LEU | B | 281 | 66.288 | 28.630 | 1.511 | 1.00 | 28.48 | C |
| ATOM | 5386 | O | LEU | B | 281 | 66.214 | 28.637 | 2.751 | 1.00 | 27.93 | O |
| ATOM | 5387 | CB | LEU | B | 281 | 64.332 | 29.634 | 0.368 | 1.00 | 29.13 | C |
| ATOM | 5388 | CG | LEU | B | 281 | 63.166 | 29.468 | -0.613 | 1.00 | 30.25 | C |
| ATOM | 5389 | CD1 | LEU | B | 281 | 61.866 | 29.627 | 0.148 | 1.00 | 31.16 | C |
| ATOM | 5390 | CD2 | LEU | B | 281 | 63.233 | 30.518 | -1.693 | 1.00 | 30.75 | C |
| ATOM | 5391 | N | ILE | B | 282 | 67.403 | 28.916 | 0.842 | 1.00 | 28.25 | N |
| ATOM | 5392 | CA | ILE | B | 282 | 68.632 | 29.226 | 1.533 | 1.00 | 28.75 | C |
| ATOM | 5393 | C | ILE | B | 282 | 69.103 | 30.588 | 1.075 | 1.00 | 29.32 | C |
| ATOM | 5394 | O | ILE | B | 282 | 68.998 | 30.947 | -0.091 | 1.00 | 28.93 | O |
| ATOM | 5395 | CB | ILE | B | 282 | 69.695 | 28.178 | 1.262 | 1.00 | 30.17 | C |
| ATOM | 5396 | CG1 | ILE | B | 282 | 69.120 | 26.777 | 1.563 | 1.00 | 30.24 | C |
| ATOM | 5397 | CG2 | ILE | B | 282 | 70.913 | 28.471 | 2.127 | 1.00 | 29.74 | C |
| ATOM | 5398 | CD1 | ILE | B | 282 | 70.132 | 25.615 | 1.419 | 1.00 | 30.77 | C |
| ATOM | 5399 | N | TRP | B | 283 | 69.628 | 31.341 | 2.022 | 1.00 | 29.75 | N |
| ATOM | 5400 | CA | TRP | B | 283 | 70.040 | 32.701 | 1.781 | 1.00 | 29.50 | C |
| ATOM | 5401 | C | TRP | B | 283 | 71.421 | 32.964 | 2.345 | 1.00 | 30.29 | C |
| ATOM | 5402 | O | TRP | B | 283 | 71.671 | 32.727 | 3.535 | 1.00 | 30.38 | O |
| ATOM | 5403 | CB | TRP | B | 283 | 68.996 | 33.607 | 2.464 | 1.00 | 28.69 | C |
| ATOM | 5404 | CG | TRP | B | 283 | 69.331 | 35.069 | 2.560 | 1.00 | 28.30 | C |
| ATOM | 5405 | CD1 | TRP | B | 283 | 70.295 | 35.748 | 1.865 | 1.00 | 27.57 | C |
| ATOM | 5406 | CD2 | TRP | B | 283 | 68.724 | 36.018 | 3.452 | 1.00 | 27.88 | C |
| ATOM | 5407 | NE1 | TRP | B | 283 | 70.330 | 37.071 | 2.284 | 1.00 | 28.96 | N |
| ATOM | 5408 | CE2 | TRP | B | 283 | 69.378 | 37.255 | 3.259 | 1.00 | 28.08 | C |
| ATOM | 5409 | CE3 | TRP | B | 283 | 67.680 | 35.937 | 4.404 | 1.00 | 28.44 | C |
| ATOM | 5410 | CZ2 | TRP | B | 283 | 69.039 | 38.401 | 3.982 | 1.00 | 28.52 | C |
| ATOM | 5411 | CZ3 | TRP | B | 283 | 67.332 | 37.091 | 5.126 | 1.00 | 27.59 | C |
| ATOM | 5412 | CH2 | TRP | B | 283 | 68.011 | 38.303 | 4.912 | 1.00 | 28.45 | C |
| ATOM | 5413 | N | MET | B | 284 | 72.318 | 33.439 | 1.483 | 1.00 | 30.31 | N |
| ATOM | 5414 | CA | MET | B | 284 | 73.653 | 33.799 | 1.893 | 1.00 | 30.96 | C |
| ATOM | 5415 | C | MET | B | 284 | 73.615 | 35.322 | 2.156 | 1.00 | 31.33 | C |
| ATOM | 5416 | O | MET | B | 284 | 73.478 | 36.128 | 1.223 | 1.00 | 30.83 | O |
| ATOM | 5417 | CB | MET | B | 284 | 74.654 | 33.490 | 0.775 | 1.00 | 31.41 | C |
| ATOM | 5418 | CG | MET | B | 284 | 76.037 | 34.046 | 1.061 | 1.00 | 34.09 | C |
| ATOM | 5419 | SD | MET | B | 284 | 77.313 | 33.529 | -0.179 | 1.00 | 33.68 | S |
| ATOM | 5420 | CE | MET | B | 284 | 76.632 | 34.404 | -1.675 | 1.00 | 36.96 | C |
| ATOM | 5421 | N | GLU | B | 285 | 73.687 | 35.732 | 3.419 | 1.00 | 31.41 | N |
| ATOM | 5422 | CA | GLU | B | 285 | 73.659 | 37.172 | 3.714 | 1.00 | 32.46 | C |
| ATOM | 5423 | C | GLU | B | 285 | 74.874 | 37.816 | 3.043 | 1.00 | 33.08 | C |
| ATOM | 5424 | O | GLU | B | 285 | 75.983 | 37.282 | 3.110 | 1.00 | 32.03 | O |
| ATOM | 5425 | CB | GLU | B | 285 | 73.713 | 37.405 | 5.242 | 1.00 | 32.63 | C |
| ATOM | 5426 | CG | GLU | B | 285 | 74.225 | 38.759 | 5.683 | 1.00 | 32.72 | C |
| ATOM | 5427 | CD | GLU | B | 285 | 73.242 | 39.883 | 5.430 | 1.00 | 32.89 | C |
| ATOM | 5428 | OE1 | GLU | B | 285 | 72.264 | 39.681 | 4.681 | 1.00 | 33.25 | O |
| ATOM | 5429 | OE2 | GLU | B | 285 | 73.460 | 40.981 | 5.975 | 1.00 | 33.12 | O |
| ATOM | 5430 | N | THR | B | 286 | 74.682 | 38.953 | 2.389 | 1.00 | 34.34 | N |
| ATOM | 5431 | CA | THR | B | 286 | 75.834 | 39.590 | 1.789 | 1.00 | 36.18 | C |
| ATOM | 5432 | C | THR | B | 286 | 75.796 | 41.108 | 1.882 | 1.00 | 36.89 | C |
| ATOM | 5433 | O | THR | B | 286 | 74.725 | 41.721 | 1.967 | 1.00 | 36.82 | O |
| ATOM | 5434 | CB | THR | B | 286 | 76.042 | 39.165 | 0.314 | 1.00 | 37.35 | C |
| ATOM | 5435 | OG1 | THR | B | 286 | 77.333 | 39.654 | -0.116 | 1.00 | 39.69 | O |
| ATOM | 5436 | CG2 | THR | B | 286 | 74.950 | 39.734 | -0.587 | 1.00 | 35.62 | C |
| ATOM | 5437 | N | GLY | B | 287 | 76.982 | 41.705 | 1.874 | 1.00 | 37.77 | N |
| ATOM | 5438 | CA | GLY | B | 287 | 77.083 | 43.147 | 2.003 | 1.00 | 38.69 | C |
| ATOM | 5439 | C | GLY | B | 287 | 77.156 | 43.922 | 0.707 | 1.00 | 38.84 | C |
| ATOM | 5440 | O | GLY | B | 287 | 76.635 | 45.042 | 0.618 | 1.00 | 40.44 | O |
| ATOM | 5441 | N | THR | B | 288 | 77.787 | 43.326 | -0.296 | 1.00 | 38.14 | N |
| ATOM | 5442 | CA | THR | B | 288 | 77.960 | 43.951 | -1.600 | 1.00 | 37.62 | C |
| ATOM | 5443 | C | THR | B | 288 | 77.339 | 43.075 | -2.679 | 1.00 | 36.28 | C |
| ATOM | 5444 | O | THR | B | 288 | 77.689 | 41.900 | -2.801 | 1.00 | 36.07 | O |
| ATOM | 5445 | CB | THR | B | 288 | 79.477 | 44.105 | -1.941 | 1.00 | 38.12 | C |
| ATOM | 5446 | OG1 | THR | B | 288 | 80.120 | 44.878 | -0.923 | 1.00 | 39.54 | O |
| ATOM | 5447 | CG2 | THR | B | 288 | 79.671 | 44.794 | -3.273 | 1.00 | 37.01 | C |
| ATOM | 5448 | N | PRO | B | 289 | 76.405 | 43.625 | -3.466 | 1.00 | 35.48 | N |

| ATOM | 5449 | CA | PRO B 289 | 75.842 | 42.751 | -4.502 | 1.00 | 35.22 | C |
|------|------|-----|-----------|--------|--------|---------|------|-------|---|
| ATOM | 5450 | C | PRO B 289 | 76.998 | 42.286 | -5.392 | 1.00 | 34.82 | C |
| ATOM | 5451 | O | PRO B 289 | 77.877 | 43.063 | -5.764 | 1.00 | 35.06 | O |
| ATOM | 5452 | CB | PRO B 289 | 74.818 | 43.640 | -5.208 | 1.00 | 35.39 | C |
| ATOM | 5453 | CG | PRO B 289 | 75.234 | 45.055 | -4.844 | 1.00 | 35.92 | C |
| ATOM | 5454 | CD | PRO B 289 | 75.754 | 44.943 | -3.442 | 1.00 | 35.52 | C |
| ATOM | 5455 | N | ASP B 290 | 77.025 | 41.002 | -5.684 | 1.00 | 34.39 | N |
| ATOM | 5456 | CA | ASP B 290 | 78.109 | 40.445 | -6.464 | 1.00 | 33.84 | C |
| ATOM | 5457 | C | ASP B 290 | 77.598 | 39.262 | -7.264 | 1.00 | 33.13 | C |
| ATOM | 5458 | O | ASP B 290 | 77.439 | 38.160 | -6.735 | 1.00 | 31.86 | O |
| ATOM | 5459 | CB | ASP B 290 | 79.222 | 40.020 | -5.498 | 1.00 | 34.43 | C |
| ATOM | 5460 | CG | ASP B 290 | 80.436 | 39.440 | -6.206 | 1.00 | 35.23 | C |
| ATOM | 5461 | OD1 | ASP B 290 | 80.319 | 38.984 | -7.360 | 1.00 | 34.16 | O |
| ATOM | 5462 | OD2 | ASP B 290 | 81.514 | 39.425 | -5.576 | 1.00 | 36.28 | O |
| ATOM | 5463 | N | LEU B 291 | 77.339 | 39.487 | -8.545 | 1.00 | 33.21 | N |
| ATOM | 5464 | CA | LEU B 291 | 76.832 | 38.417 | -9.394 | 1.00 | 34.20 | C |
| ATOM | 5465 | C | LEU B 291 | 77.714 | 37.183 | -9.426 | 1.00 | 34.25 | C |
| ATOM | 5466 | O | LEU B 291 | 77.209 | 36.070 | -9.486 | 1.00 | 34.70 | O |
| ATOM | 5467 | CB | LEU B 291 | 76.653 | 38.896 | -10.830 | 1.00 | 34.95 | C |
| ATOM | 5468 | CG | LEU B 291 | 75.356 | 39.595 | -11.169 | 1.00 | 36.63 | C |
| ATOM | 5469 | CD1 | LEU B 291 | 75.314 | 39.806 | -12.678 | 1.00 | 36.66 | C |
| ATOM | 5470 | CD2 | LEU B 291 | 74.167 | 38.702 | -10.744 | 1.00 | 36.62 | C |
| ATOM | 5471 | N | GLU B 292 | 79.025 | 37.371 | -9.417 | 1.00 | 34.68 | N |
| ATOM | 5472 | CA | GLU B 292 | 79.938 | 36.223 | -9.449 | 1.00 | 35.44 | C |
| ATOM | 5473 | C | GLU B 292 | 79.822 | 35.400 | -8.160 | 1.00 | 34.71 | C |
| ATOM | 5474 | O | GLU B 292 | 79.696 | 34.170 | -8.218 | 1.00 | 34.40 | O |
| ATOM | 5475 | CB | GLU B 292 | 81.389 | 36.681 | -9.659 | 1.00 | 36.99 | C |
| ATOM | 5476 | CG | GLU B 292 | 82.398 | 35.542 | -9.887 | 1.00 | 39.19 | C |
| ATOM | 5477 | CD | GLU B 292 | 81.906 | 34.430 | -10.851 | 1.00 | 41.48 | C |
| ATOM | 5478 | OE1 | GLU B 292 | 81.323 | 34.717 | -11.924 | 1.00 | 41.48 | O |
| ATOM | 5479 | OE2 | GLU B 292 | 82.122 | 33.240 | -10.532 | 1.00 | 42.89 | O |
| ATOM | 5480 | N | ALA B 293 | 79.833 | 36.069 | -7.002 | 1.00 | 33.57 | N |
| ATOM | 5481 | CA | ALA B 293 | 79.704 | 35.348 | -5.726 | 1.00 | 32.55 | C |
| ATOM | 5482 | C | ALA B 293 | 78.365 | 34.609 | -5.714 | 1.00 | 32.00 | C |
| ATOM | 5483 | O | ALA B 293 | 78.298 | 33.418 | -5.371 | 1.00 | 31.78 | O |
| ATOM | 5484 | CB | ALA B 293 | 79.802 | 36.321 | -4.535 | 1.00 | 32.29 | C |
| ATOM | 5485 | N | ALA B 294 | 77.299 | 35.305 | -6.111 | 1.00 | 31.42 | N· |
| ATOM | 5486 | CA | ALA B 294 | 75.969 | 34.681 | -6.190 | 1.00 | 31.37 | C |
| ATOM | 5487 | C | ALA B 294 | 75.985 | 33.422 | -7.085 | 1.00 | 31.80 | C |
| ATOM | 5488 | O | ALA B 294 | 75.406 | 32.379 | -6.745 | 1.00 | 30.59, | O |
| ATOM | 5489 | CB | ALA B 294 | 74.956 | 35.679 | -6.743 | 1.00 | 29.58 | C |
| ATOM | 5490 | N | ARG B 295 | 76.628 | 33.532 | -8.250 | 1.00 | 32.71 | N |
| ATOM | 5491 | CA | ARG B 295 | 76.711 | 32.397 | -9.171 | 1.00 | 33.57 | C |
| ATOM | 5492 | C | ARG B 295 | 77.502 | 31.255 | -8.525 | 1.00 | 33.75 | C |
| ATOM | 5493 | O | ARG B 295 | 77.104 | 30.082 | -8.567 | 1.00 | 34.00 | O |
| ATOM | 5494 | CB | ARG B 295 | 77.378 | 32.837 | -10.471 | 1.00 | 34.34 | C |
| ATOM | 5495 | CG | ARG B 295 | 77.432 | 31.770 | -11.571 | 1.00 | 36.69 | C |
| ATOM | 5496 | CD | ARG B 295 | 78.052 | 32.347 | -12.865 | 1.00 | 37.32 | C |
| ATOM | 5497 | NE | ARG B 295 | 77.234 | 33.420 | -13.434 | 1.00 | 39.64 | N |
| ATOM | 5498 | CZ | ARG B 295 | 77.562 | 34.719 | -13.433 | 1.00 | 41.85 | C |
| ATOM | 5499 | NH1 | ARG B 295 | 78.713 | 35.150 | -12.888 | 1.00 | 41.08 | N |
| ATOM | 5500 | NH2 | ARG B 295 | 76.726 | 35.612 | -13.987 | 1.00 | 43.14 | N |
| ATOM | 5501 | N | GLN B 296 | 78.613 | 31.600 | -7.904 | 1.00 | 34.35 | N |
| ATOM | 5502 | CA | GLN B 296 | 79.455 | 30.603 | -7.272 | 1.00 | 35.05 | C |
| ATOM | 5503 | C | GLN B 296 | 78.663 | 29.915 | -6.159 | 1.00 | 34.72 | C |
| ATOM | 5504 | O | GLN B 296 | 78.639 | 28.682 | -6.062 | 1.00 | 34.24 | O |
| ATOM | 5505 | CB | GLN B 296 | 80.695 | 31.289 | -6.719 | 1.00 | 37.55 | C |
| ATOM | 5506 | CG | GLN B 296 | 81.814 | 30.340 | -6.400 | 1.00 | 41.21 | C |
| ATOM | 5507 | CD | GLN B 296 | 82.962 | 30.987 | -5.649 | 1.00 | 42.75 | C |
| ATOM | 5508 | OE1 | GLN B 296 | 83.724 | 30.295 | -4.970 | 1.00 | 44.83 | O |
| ATOM | 5509 | NE2 | GLN B 296 | 83.102 | 32.299 | -5.765 | 1.00 | 43.35 | N |
| ATOM | 5510 | N | PHE B 297 | 77.987 | 30.700 | -5.325 | 1.00 | 33.37 | N |
| ATOM | 5511 | CA | PHE B 297 | 77.214 | 30.106 | -4.228 | 1.00 | 32.62 | C |
| ATOM | 5512 | C | PHE B 297 | 76.110 | 29.218 | -4.753 | 1.00 | 32.69 | C |
| ATOM | 5513 | O | PHE B 297 | 75.977 | 28.076 | -4.309 | 1.00 | 32.67 | O |
| ATOM | 5514 | CB | PHE B 297 | 76.611 | 31.201 | -3.330 | 1.00 | 31.74 | C |
| ATOM | 5515 | CG | PHE B 297 | 75.671 | 30.682 | -2.256 | 1.00 | 32.01 | C |
| ATOM | 5516 | CD1 | PHE B 297 | 76.167 | 30.091 | -1.096 | 1.00 | 31.54 | C |
| ATOM | 5517 | CD2 | PHE B 297 | 74.289 | 30.874 | -2.370 | 1.00 | 32.02 | C |
| ATOM | 5518 | CE1 | PHE B 297 | 75.311 | 29.722 | -0.069 | 1.00 | 31.70 | C |
| ATOM | 5519 | CE2 | PHE B 297 | 73.421 | 30.500 | -1.328 | 1.00 | 31.59 | C |
| ATOM | 5520 | CZ | PHE B 297 | 73.937 | 29.932 | -0.188 | 1.00 | 30.94 | C |
| ATOM | 5521 | N | SER B 298 | 75.306 | 29.707 | -5.697 | 1.00 | 32.99 | N |
| ATOM | 5522 | CA | SER B 298 | 74.212 | 28.873 | -6.169 | 1.00 | 34.02 | C |
| ATOM | 5523 | C | SER B 298 | 74.633 | 27.618 | -6.913 | 1.00 | 34.11 | C |
| ATOM | 5524 | O | SER B 298 | 74.026 | 26.571 | -6.706 | 1.00 | 33.58 | O |
| ATOM | 5525 | CB | SER B 298 | 73.214 | 29.660 | -7.032 | 1.00 | 35.14 | C |
| ATOM | 5526 | OG | SER B 298 | 73.782 | 30.123 | -8.233 | 1.00 | 36.37 | O |
| ATOM | 5527 | N | GLU B 299 | 75.656 | 27.704 | -7.760 | 1.00 | 34.57 | N |
| ATOM | 5528 | CA | GLU B 299 | 76.098 | 26.521 | -8.498 | 1.00 | 35.77 | C |

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ATOM   5529  C    GLU B 299      76.639  25.456  -7.529  1.00 35.67           C
ATOM   5530  O    GLU B 299      76.374  24.267  -7.710  1.00 36.15           O
ATOM   5531  CB   GLU B 299      77.156  26.904  -9.570  1.00 36.85           C
ATOM   5532  CG   GLU B 299      76.590  27.880 -10.601  1.00 39.25           C
ATOM   5533  CD   GLU B 299      77.456  28.112 -11.842  1.00 40.76           C
ATOM   5534  OE1  GLU B 299      78.676  27.826 -11.809  1.00 41.42           O
ATOM   5535  OE2  GLU B 299      76.885  28.611 -12.855  1.00 42.55           O
ATOM   5536  N    ALA B 300      77.362  25.880  -6.490  1.00 35.18           N
ATOM   5537  CA   ALA B 300      77.915  24.944  -5.509  1.00 34.91           C
ATOM   5538  C    ALA B 300      76.789  24.229  -4.713  1.00 35.22           C
ATOM   5539  O    ALA B 300      76.859  23.024  -4.453  1.00 35.09           O
ATOM   5540  CB   ALA B 300      78.887  25.684  -4.553  1.00 34.18           C
ATOM   5541  N    VAL B 301      75.735  24.963  -4.354  1.00 34.75           N
ATOM   5542  CA   VAL B 301      74.629  24.366  -3.608  1.00 34.04           C
ATOM   5543  C    VAL B 301      73.823  23.437  -4.522  1.00 34.79           C
ATOM   5544  O    VAL B 301      73.450  22.312  -4.143  1.00 34.07           O
ATOM   5545  CB   VAL B 301      73.674  25.464  -3.049  1.00 33.40           C
ATOM   5546  CG1  VAL B 301      72.438  24.826  -2.408  1.00 33.38           C
ATOM   5547  CG2  VAL B 301      74.394  26.309  -2.031  1.00 32.54           C
ATOM   5548  N    LYS B 302      73.557  23.900  -5.736  1.00 35.37           N
ATOM   5549  CA   LYS B 302      72.763  23.108  -6.647  1.00 36.70           C
ATOM   5550  C    LYS B 302      73.491  21.866  -7.184  1.00 37.28           C
ATOM   5551  O    LYS B 302      72.838  20.930  -7.661  1.00 36.80           O
ATOM   5552  CB   LYS B 302      72.234  23.980  -7.791  1.00 37.10           C
ATOM   5553  CG   LYS B 302      71.104  24.941  -7.377  1.00 37.78           C
ATOM   5554  CD   LYS B 302      70.475  25.591  -8.608  1.00 39.08           C
ATOM   5555  CE   LYS B 302      69.268  26.480  -8.281  1.00 39.76           C
ATOM   5556  NZ   LYS B 302      68.004  25.768  -7.820  1.00 39.83           N
ATOM   5557  N    ALA B 303      74.820  21.855  -7.093  1.00 37.75           N
ATOM   5558  CA   ALA B 303      75.594  20.700  -7.543  1.00 39.19           C
ATOM   5559  C    ALA B 303      75.232  19.564  -6.590  1.00 40.50           C
ATOM   5560  O    ALA B 303      75.278  18.389  -6.951  1.00 41.27           O
ATOM   5561  CB   ALA B 303      77.089  20.985  -7.468  1.00 37.76           C
ATOM   5562  N    GLU B 304      74.868  19.913  -5.364  1.00 40.78           N
ATOM   5563  CA   GLU B 304      74.481  18.905  -4.385  1.00 41.41           C
ATOM   5564  C    GLU B 304      72.975  18.756  -4.320  1.00 40.52           C
ATOM   5565  O    GLU B 304      72.474  17.650  -4.197  1.00 40.47           O
ATOM   5566  CB   GLU B 304      74.985  19.272  -2.990  1.00 43.57           C
ATOM   5567  CG   GLU B 304      76.478  19.166  -2.823  1.00 47.24           C
ATOM   5568  CD   GLU B 304      76.929  17.733  -2.932  1.00 49.36           C
ATOM   5569  OE1  GLU B 304      76.298  16.886  -2.261  1.00 50.86           O
ATOM   5570  OE2  GLU B 304      77.895  17.451  -3.680  1.00 50.66           O
ATOM   5571  N    TYR B 305      72.253  19.872  -4.390  1.00 39.56           N
ATOM   5572  CA   TYR B 305      70.801  19.847  -4.319  1.00 38.90           C
ATOM   5573  C    TYR B 305      70.253  20.647  -5.483  1.00 38.90           C
ATOM   5574  O    TYR B 305      69.842  21.797  -5.327  1.00 38.63           O
ATOM   5575  CB   TYR B 305      70.324  20.445  -2.988  1.00 38.75           C
ATOM   5576  CG   TYR B 305      70.878  19.741  -1.760  1.00 38.12           C
ATOM   5577  CD1  TYR B 305      72.114  20.072  -1.233  1.00 38.25           C
ATOM   5578  CD2  TYR B 305      70.169  18.723  -1.154  1.00 38.95           C
ATOM   5579  CE1  TYR B 305      72.637  19.393  -0.107  1.00 38.88           C
ATOM   5580  CE2  TYR B 305      70.673  18.041  -0.050  1.00 39.20           C
ATOM   5581  CZ   TYR B 305      71.906  18.382   0.466  1.00 39.34           C
ATOM   5582  OH   TYR B 305      72.391  17.667   1.533  1.00 40.86           O
ATOM   5583  N    PRO B 306      70.195  20.024  -6.673  1.00 38.62           N
ATOM   5584  CA   PRO B 306      69.702  20.673  -7.888  1.00 38.09           C
ATOM   5585  C    PRO B 306      68.387  21.456  -7.808  1.00 37.41           C
ATOM   5586  O    PRO B 306      68.261  22.502  -8.434  1.00 36.63           O
ATOM   5587  CB   PRO B 306      69.649  19.520  -8.918  1.00 38.76           C
ATOM   5588  CG   PRO B 306      69.644  18.255  -8.059  1.00 39.00           C
ATOM   5589  CD   PRO B 306      70.543  18.611  -6.918  1.00 38.78           C
ATOM   5590  N    ASP B 307      67.412  20.968  -7.062  1.00 36.52           N
ATOM   5591  CA   ASP B 307      66.148  21.690  -6.977  1.00 36.23           C
ATOM   5592  C    ASP B 307      66.037  22.687  -5.810  1.00 35.50           C
ATOM   5593  O    ASP B 307      64.959  23.224  -5.561  1.00 35.11           O
ATOM   5594  CB   ASP B 307      64.997  20.704  -6.881  1.00 37.39           C
ATOM   5595  CG   ASP B 307      64.942  19.763  -8.082  1.00 39.35           C
ATOM   5596  OD1  ASP B 307      65.440  20.144  -9.163  1.00 39.75           O
ATOM   5597  OD2  ASP B 307      64.392  18.651  -7.936  1.00 40.85           O
ATOM   5598  N    GLN B 308      67.131  22.930  -5.099  1.00 33.98           N
ATOM   5599  CA   GLN B 308      67.099  23.849  -3.959  1.00 33.05           C
ATOM   5600  C    GLN B 308      66.912  25.315  -4.376  1.00 32.27           C
ATOM   5601  O    GLN B 308      67.760  25.861  -5.069  1.00 32.84           O
ATOM   5602  CB   GLN B 308      68.401  23.727  -3.156  1.00 32.16           C
ATOM   5603  CG   GLN B 308      68.460  24.671  -1.944  1.00 31.38           C
ATOM   5604  CD   GLN B 308      67.364  24.346  -0.931  1.00 31.08           C
ATOM   5605  OE1  GLN B 308      66.423  25.139  -0.726  1.00 31.49           O
ATOM   5606  NE2  GLN B 308      67.464  23.189  -0.316  1.00 28.92           N
ATOM   5607  N    MET B 309      65.814  25.939  -3.965  1.00 31.46           N
ATOM   5608  CA   MET B 309      65.585  27.349  -4.280  1.00 30.96           C
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| ATOM | 5609 | C | MET | B | 309 | 66.370 | 28.224 | -3.313 | 1.00 | 29.87 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5610 | O | MET | B | 309 | 66.600 | 27.852 | -2.156 | 1.00 | 29.32 | O |
| ATOM | 5611 | CB | MET | B | 309 | 64.097 | 27.696 | -4.203 | 1.00 | 31.49 | C |
| ATOM | 5612 | CG | MET | B | 309 | 63.276 | 26.974 | -5.277 | 1.00 | 33.56 | C |
| ATOM | 5613 | SD | MET | B | 309 | 61.550 | 27.437 | -5.185 | 1.00 | 35.32 | S |
| ATOM | 5614 | CE | MET | B | 309 | 61.060 | 26.636 | -3.625 | 1.00 | 34.76 | C |
| ATOM | 5615 | N | LEU | B | 310 | 66.780 | 29.394 | -3.793 | 1.00 | 29.15 | N |
| ATOM | 5616 | CA | LEU | B | 310 | 67.564 | 30.305 | -2.976 | 1.00 | 28.24 | C |
| ATOM | 5617 | C | LEU | B | 310 | 66.868 | 31.639 | -2.804 | 1.00 | 27.76 | C |
| ATOM | 5618 | O | LEU | B | 310 | 65.992 | 31.975 | -3.589 | 1.00 | 28.40 | O |
| ATOM | 5619 | CB | LEU | B | 310 | 68.923 | 30.515 | -3.630 | 1.00 | 27.82 | C |
| ATOM | 5620 | CG | LEU | B | 310 | 69.590 | 29.205 | -4.046 | 1.00 | 28.92 | C |
| ATOM | 5621 | CD1 | LEU | B | 310 | 70.729 | 29.555 | -4.969 | 1.00 | 29.55 | C |
| ATOM | 5622 | CD2 | LEU | B | 310 | 70.094 | 28.437 | -2.801 | 1.00 | 28.37 | C |
| ATOM | 5623 | N | ALA | B | 311 | 67.264 | 32.400 | -1.784 | 1.00 | 27.65 | N |
| ATOM | 5624 | CA | ALA | B | 311 | 66.684 | 33.727 | -1.536 | 1.00 | 27.26 | C |
| ATOM | 5625 | C | ALA | B | 311 | 67.841 | 34.740 | -1.584 | 1.00 | 27.09 | C |
| ATOM | 5626 | O | ALA | B | 311 | 68.972 | 34.392 | -1.274 | 1.00 | 27.12 | O |
| ATOM | 5627 | CB | ALA | B | 311 | 66.021 | 33.754 | -0.176 | 1.00 | 26.83 | C |
| ATOM | 5628 | N | TYR | B | 312 | 67.555 | 35.987 | -1.940 | 1.00 | 27.12 | N |
| ATOM | 5629 | CA | TYR | B | 312 | 68.612 | 36.996 | -2.071 | 1.00 | 27.58 | C |
| ATOM | 5630 | C | TYR | B | 312 | 68.195 | 38.404 | -1.638 | 1.00 | 27.97 | C |
| ATOM | 5631 | O | TYR | B | 312 | 67.164 | 38.881 | -2.111 | 1.00 | 28.06 | O |
| ATOM | 5632 | CB | TYR | B | 312 | 69.046 | 37.051 | -3.548 | 1.00 | 27.63 | C |
| ATOM | 5633 | CG | TYR | B | 312 | 70.315 | 37.830 | -3.812 | 1.00 | 27.46 | C |
| ATOM | 5634 | CD1 | TYR | B | 312 | 70.292 | 39.215 | -3.972 | 1.00 | 27.21 | C |
| ATOM | 5635 | CD2 | TYR | B | 312 | 71.548 | 37.170 | -3.877 | 1.00 | 27.98 | C |
| ATOM | 5636 | CE1 | TYR | B | 312 | 71.468 | 39.934 | -4.190 | 1.00 | 27.87 | C |
| ATOM | 5637 | CE2 | TYR | B | 312 | 72.737 | 37.876 | -4.084 | 1.00 | 28.24 | C |
| ATOM | 5638 | CZ | TYR | B | 312 | 72.681 | 39.255 | -4.237 | 1.00 | 28.72 | C |
| ATOM | 5639 | OH | TYR | B | 312 | 73.860 | 39.932 | -4.408 | 1.00 | 30.44 | O |
| ATOM | 5640 | N | ASN | B | 313 | 68.967 | 39.066 | -0.752 | 1.00 | 28.20 | N |
| ATOM | 5641 | CA | ASN | B | 313 | 68.638 | 40.459 | -0.385 | 1.00 | 28.58 | C |
| ATOM | 5642 | C | ASN | B | 313 | 69.472 | 41.357 | -1.288 | 1.00 | 28.11 | C |
| ATOM | 5643 | O | ASN | B | 313 | 70.702 | 41.187 | -1.369 | 1.00 | 26.83 | O |
| ATOM | 5644 | CB | ASN | B | 313 | 68.974 | 40.830 | 1.092 | 1.00 | 30.70 | C |
| ATOM | 5645 | CG | ASN | B | 313 | 68.722 | 42.389 | 1.424 | 1.00 | 33.18 | C |
| ATOM | 5646 | OD1 | ASN | B | 313 | 67.805 | 43.041 | 0.856 | 1.00 | 33.52 | O |
| ATOM | 5647 | ND2 | ASN | B | 313 | 69.544 | 42.964 | 2.358 | 1.00 | 34.31 | N |
| ATOM | 5648 | N | CYS | B | 314 | 68.806 | 42.280 | -1.979 | 1.00 | 27.65 | N |
| ATOM | 5649 | CA | CYS | B | 314 | 69.504 | 43.247 | -2.819 | 1.00 | 27.61 | C |
| ATOM | 5650 | C | CYS | B | 314 | 69.859 | 44.413 | -1.911 | 1.00 | 27.44 | C |
| ATOM | 5651 | O | CYS | B | 314 | 68.982 | 45.133 | -1.431 | 1.00 | 26.38 | O |
| ATOM | 5652 | CB | CYS | B | 314 | 68.608 | 43.684 | -3.978 | 1.00 | 27.50 | C |
| ATOM | 5653 | SG | CYS | B | 314 | 68.237 | 42.284 | -5.079 | 1.00 | 28.26 | S |
| ATOM | 5654 | N | SER | B | 315 | 71.159 | 44.623 | -1.703 | 1.00 | 27.58 | N |
| ATOM | 5655 | CA | SER | B | 315 | 71.623 | 45.663 | -0.786 | 1.00 | 28.38 | C |
| ATOM | 5656 | C | SER | B | 315 | 70.966 | 47.037 | -0.881 | 1.00 | 28.52 | C |
| ATOM | 5657 | O | SER | B | 315 | 70.950 | 47.664 | -1.947 | 1.00 | 27.88 | O |
| ATOM | 5658 | CB | SER | B | 315 | 73.133 | 45.862 | -0.917 | 1.00 | 28.56 | C |
| ATOM | 5659 | OG | SER | B | 315 | 73.535 | 46.945 | -0.086 | 1.00 | 30.06 | O |
| ATOM | 5660 | N | PRO | B | 316 | 70.421 | 47.533 | 0.246 | 1.00 | 28.23 | N |
| ATOM | 5661 | CA | PRO | B | 316 | 69.795 | 48.855 | 0.174 | 1.00 | 28.18 | C |
| ATOM | 5662 | C | PRO | B | 316 | 70.838 | 49.938 | 0.337 | 1.00 | 28.58 | C |
| ATOM | 5663 | O | PRO | B | 316 | 70.591 | 51.074 | 0.004 | 1.00 | 29.14 | O |
| ATOM | 5664 | CB | PRO | B | 316 | 68.800 | 48.843 | 1.362 | 1.00 | 28.38 | C |
| ATOM | 5665 | CG | PRO | B | 316 | 69.525 | 47.982 | 2.376 | 1.00 | 27.45 | C |
| ATOM | 5666 | CD | PRO | B | 316 | 70.074 | 46.845 | 1.512 | 1.00 | 27.99 | C |
| ATOM | 5667 | N | SER | B | 317 | 72.004 | 49.595 | 0.878 | 1.00 | 29.70 | N |
| ATOM | 5668 | CA | SER | B | 317 | 73.046 | 50.599 | 1.121 | 1.00 | 30.16 | C |
| ATOM | 5669 | C | SER | B | 317 | 74.110 | 50.733 | 0.021 | 1.00 | 30.88 | C |
| ATOM | 5670 | O | SER | B | 317 | 74.793 | 51.750 | -0.060 | 1.00 | 30.57 | O |
| ATOM | 5671 | CB | SER | B | 317 | 73.746 | 50.304 | 2.447 | 1.00 | 30.11 | C |
| ATOM | 5672 | OG | SER | B | 317 | 74.342 | 49.008 | 2.418 | 1.00 | 30.40 | O |
| ATOM | 5673 | N | PHE | B | 318 | 74.259 | 49.709 | -0.808 | 1.00 | 30.53 | N |
| ATOM | 5674 | CA | PHE | B | 318 | 75.232 | 49.745 | -1.904 | 1.00 | 31.33 | C |
| ATOM | 5675 | C | PHE | B | 318 | 74.952 | 50.921 | -2.834 | 1.00 | 31.00 | C |
| ATOM | 5676 | O | PHE | B | 318 | 73.801 | 51.173 | -3.181 | 1.00 | 30.80 | O |
| ATOM | 5677 | CB | PHE | B | 318 | 75.130 | 48.458 | -2.716 | 1.00 | 31.16 | C |
| ATOM | 5678 | CG | PHE | B | 318 | 76.148 | 48.338 | -3.811 | 1.00 | 32.68 | C |
| ATOM | 5679 | CD1 | PHE | B | 318 | 77.527 | 48.281 | -3.510 | 1.00 | 33.29 | C |
| ATOM | 5680 | CD2 | PHE | B | 318 | 75.741 | 48.178 | -5.133 | 1.00 | 32.37 | C |
| ATOM | 5681 | CE1 | PHE | B | 318 | 78.470 | 48.053 | -4.518 | 1.00 | 33.59 | C |
| ATOM | 5682 | CE2 | PHE | B | 318 | 76.697 | 47.950 | -6.153 | 1.00 | 33.56 | C |
| ATOM | 5683 | CZ | PHE | B | 318 | 78.053 | 47.886 | -5.832 | 1.00 | 32.35 | C |
| ATOM | 5684 | N | ASN | B | 319 | 75.991 | 51.636 | -3.246 | 1.00 | 30.62 | N |
| ATOM | 5685 | CA | ASN | B | 319 | 75.791 | 52.752 | -4.164 | 1.00 | 30.75 | C |
| ATOM | 5686 | C | ASN | B | 319 | 75.746 | 52.132 | -5.556 | 1.00 | 31.14 | C |
| ATOM | 5687 | O | ASN | B | 319 | 76.776 | 52.054 | -6.243 | 1.00 | 30.41 | O |
| ATOM | 5688 | CB | ASN | B | 319 | 76.953 | 53.725 | -4.050 | 1.00 | 30.97 | C |

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ATOM   5689  CG   ASN B 319      76.698  55.043  -4.770  1.00 31.14           C
ATOM   5690  OD1  ASN B 319      77.261  56.081  -4.381  1.00 33.20           O
ATOM   5691  ND2  ASN B 319      75.885  55.023  -5.798  1.00 29.05           N
ATOM   5692  N    TRP B 320      74.552  51.695  -5.963  1.00 30.73           N
ATOM   5693  CA   TRP B 320      74.350  51.034  -7.259  1.00 31.76           C
ATOM   5694  C    TRP B 320      74.838  51.822  -8.493  1.00 33.31           C
ATOM   5695  O    TRP B 320      75.643  51.292  -9.271  1.00 32.66           O
ATOM   5696  CB   TRP B 320      72.868  50.670  -7.456  1.00 30.96           C
ATOM   5697  CG   TRP B 320      72.338  49.651  -6.440  1.00 29.83           C
ATOM   5698  CD1  TRP B 320      71.904  49.913  -5.169  1.00 30.20           C
ATOM   5699  CD2  TRP B 320      72.256  48.230  -6.606  1.00 29.76           C
ATOM   5700  NE1  TRP B 320      71.559  48.741  -4.526  1.00 30.24           N
ATOM   5701  CE2  TRP B 320      71.762  47.690  -5.384  1.00 29.86           C
ATOM   5702  CE3  TRP B 320      72.547  47.357  -7.667  1.00 29.89           C
ATOM   5703  CZ2  TRP B 320      71.554  46.318  -5.194  1.00 29.17           C
ATOM   5704  CZ3  TRP B 320      72.339  45.993  -7.488  1.00 30.18           C
ATOM   5705  CH2  TRP B 320      71.840  45.483  -6.244  1.00 30.19           C
ATOM   5706  N    LYS B 321      74.363  53.065  -8.658  1.00 34.20           N
ATOM   5707  CA   LYS B 321      74.728  53.891  -9.820  1.00 36.76           C
ATOM   5708  C    LYS B 321      76.215  54.179  -9.933  1.00 36.58           C
ATOM   5709  O    LYS B 321      76.754  54.278 -11.034  1.00 36.30           O
ATOM   5710  CB   LYS B 321      73.982  55.231  -9.810  1.00 38.51           C
ATOM   5711  CG   LYS B 321      72.806  55.311 -10.784  1.00 42.45           C
ATOM   5712  CD   LYS B 321      72.470  56.780 -11.114  1.00 45.09           C
ATOM   5713  CE   LYS B 321      71.483  56.941 -12.321  1.00 47.58           C
ATOM   5714  NZ   LYS B 321      70.021  56.608 -12.013  1.00 48.17           N
ATOM   5715  N    LYS B 322      76.872  54.330  -8.790  1.00 36.39           N
ATOM   5716  CA   LYS B 322      78.291  54.609  -8.794  1.00 36.42           C
ATOM   5717  C    LYS B 322      79.102  53.417  -9.298  1.00 35.69           C
ATOM   5718  O    LYS B 322      80.100  53.589  -9.987  1.00 34.82           O
ATOM   5719  CB   LYS B 322      78.762  54.963  -7.383  1.00 36.75           C
ATOM   5720  CG   LYS B 322      80.265  55.119  -7.290  1.00 37.98           C
ATOM   5721  CD   LYS B 322      80.709  55.454  -5.887  1.00 38.95           C
ATOM   5722  CE   LYS B 322      82.228  55.607  -5.844  1.00 40.98           C
ATOM   5723  NZ   LYS B 322      82.634  56.424  -4.681  1.00 42.45           N
ATOM   5724  N    HIS B 323      78.657  52.210  -8.974  1.00 34.58           N
ATOM   5725  CA   HIS B 323      79.403  51.016  -9.338  1.00 34.68           C
ATOM   5726  C    HIS B 323      78.939  50.178 -10.510  1.00 34.07           C
ATOM   5727  O    HIS B 323      79.692  49.326 -10.976  1.00 33.45           O
ATOM   5728  CB   HIS B 323      79.505  50.094  -8.125  1.00 35.57           C
ATOM   5729  CG   HIS B 323      80.250  50.704  -6.987  1.00 37.18           C
ATOM   5730  ND1  HIS B 323      81.598  50.990  -7.054  1.00 36.96           N
ATOM   5731  CD2  HIS B 323      79.832  51.123  -5.769  1.00 37.18           C
ATOM   5732  CE1  HIS B 323      81.980  51.560  -5.923  1.00 37.23           C
ATOM   5733  NE2  HIS B 323      80.928  51.651  -5.127  1.00 37.89           N
ATOM   5734  N    LEU B 324      77.722  50.407 -10.981  1.00 32.67           N
ATOM   5735  CA   LEU B 324      77.201  49.593 -12.058  1.00 32.51           C
ATOM   5736  C    LEU B 324      76.490  50.481 -13.064  1.00 32.72           C
ATOM   5737  O    LEU B 324      75.974  51.557 -12.707  1.00 31.34           O
ATOM   5738  CB   LEU B 324      76.239  48.532 -11.482  1.00 31.80           C
ATOM   5739  CG   LEU B 324      76.804  47.523 -10.456  1.00 32.37           C
ATOM   5740  CD1  LEU B 324      75.676  46.636  -9.931  1.00 32.17           C
ATOM   5741  CD2  LEU B 324      77.900  46.640 -11.111  1.00 32.00           C
ATOM   5742  N    ASP B 325      76.483  50.052 -14.326  1.00 32.30           N
ATOM   5743  CA   ASP B 325      75.805  50.833 -15.350  1.00 33.07           C
ATOM   5744  C    ASP B 325      74.291  50.543 -15.279  1.00 33.34           C
ATOM   5745  O    ASP B 325      73.837  49.660 -14.548  1.00 31.81           O
ATOM   5746  CB   ASP B 325      76.403  50.555 -16.763  1.00 32.86           C
ATOM   5747  CG   ASP B 325      76.151  49.125 -17.281  1.00 33.40           C
ATOM   5748  OD1  ASP B 325      75.585  48.271 -16.557  1.00 33.58           O
ATOM   5749  OD2  ASP B 325      76.533  48.836 -18.443  1.00 32.84           O
ATOM   5750  N    ASP B 326      73.509  51.306 -16.015  1.00 33.68           N
ATOM   5751  CA   ASP B 326      72.075  51.113 -15.955  1.00 34.31           C
ATOM   5752  C    ASP B 326      71.577  49.751 -16.413  1.00 34.07           C
ATOM   5753  O    ASP B 326      70.661  49.186 -15.796  1.00 33.17           O
ATOM   5754  CB   ASP B 326      71.402  52.248 -16.702  1.00 35.24           C
ATOM   5755  CG   ASP B 326      71.783  53.583 -16.120  1.00 36.95           C
ATOM   5756  OD1  ASP B 326      71.636  53.740 -14.890  1.00 36.66           O
ATOM   5757  OD2  ASP B 326      72.243  54.460 -16.876  1.00 38.31           O
ATOM   5758  N    ALA B 327      72.200  49.196 -17.457  1.00 32.15           N
ATOM   5759  CA   ALA B 327      71.783  47.893 -17.931  1.00 31.69           C
ATOM   5760  C    ALA B 327      72.009  46.802 -16.873  1.00 31.03           C
ATOM   5761  O    ALA B 327      71.164  45.926 -16.687  1.00 30.96           O
ATOM   5762  CB   ALA B 327      72.531  47.538 -19.261  1.00 31.84           C
ATOM   5763  N    THR B 328      73.144  46.842 -16.177  1.00 29.89           N
ATOM   5764  CA   THR B 328      73.429  45.818 -15.169  1.00 29.39           C
ATOM   5765  C    THR B 328      72.402  45.943 -14.013  1.00 28.67           C
ATOM   5766  O    THR B 328      71.888  44.952 -13.492  1.00 28.12           O
ATOM   5767  CB   THR B 328      74.866  45.987 -14.599  1.00 29.93           C
ATOM   5768  OG1  THR B 328      75.820  45.945 -15.680  1.00 30.04           O
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| ATOM | 5769 | CG2 | THR | B | 328 | 75.177 | 44.854 | -13.590 | 1.00 | 29.37 | C |
|------|------|-----|-----|---|-----|--------|--------|---------|------|-------|---|
| ATOM | 5770 | N | ILE | B | 329 | 72.126 | 47.173 | -13.615 | 1.00 | 27.80 | N |
| ATOM | 5771 | CA | ILE | B | 329 | 71.168 | 47.419 | -12.548 | 1.00 | 28.23 | C |
| ATOM | 5772 | C | ILE | B | 329 | 69.793 | 46.845 | -12.949 | 1.00 | 28.85 | C |
| ATOM | 5773 | O | ILE | B | 329 | 69.137 | 46.145 | -12.156 | 1.00 | 27.88 | O |
| ATOM | 5774 | CB | ILE | B | 329 | 71.065 | 48.933 | -12.271 | 1.00 | 27.22 | C |
| ATOM | 5775 | CG1 | ILE | B | 329 | 72.348 | 49.391 | -11.560 | 1.00 | 25.46 | C |
| ATOM | 5776 | CG2 | ILE | B | 329 | 69.808 | 49.256 | -11.418 | 1.00 | 27.34 | C |
| ATOM | 5777 | CD1 | ILE | B | 329 | 72.486 | 50.883 | -11.470 | 1.00 | 24.88 | C |
| ATOM | 5778 | N | ALA | B | 330 | 69.401 | 47.099 | -14.202 | 1.00 | 29.04 | N |
| ATOM | 5779 | CA | ALA | B | 330 | 68.111 | 46.659 | -14.739 | 1.00 | 29.24 | C |
| ATOM | 5780 | C | ALA | B | 330 | 67.974 | 45.167 | -14.838 | 1.00 | 29.72 | C |
| ATOM | 5781 | O | ALA | B | 330 | 66.871 | 44.634 | -14.670 | 1.00 | 29.85 | O |
| ATOM | 5782 | CB | ALA | B | 330 | 67.849 | 47.295 | -16.150 | 1.00 | 28.27 | C |
| ATOM | 5783 | N | LYS | B | 331 | 69.071 | 44.467 | -15.093 | 1.00 | 29.38 | N |
| ATOM | 5784 | CA | LYS | B | 331 | 68.967 | 43.020 | -15.251 | 1.00 | 29.79 | C |
| ATOM | 5785 | C | LYS | B | 331 | 69.342 | 42.228 | -14.010 | 1.00 | 29.52 | C |
| ATOM | 5786 | O | LYS | B | 331 | 69.182 | 41.000 | -13.984 | 1.00 | 28.55 | O |
| ATOM | 5787 | CB | LYS | B | 331 | 69.874 | 42.541 | -16.393 | 1.00 | 30.48 | C |
| ATOM | 5788 | CG | LYS | B | 331 | 71.369 | 42.411 | -15.975 | 1.00 | 30.86 | C |
| ATOM | 5789 | CD | LYS | B | 331 | 72.322 | 42.193 | -17.186 | 1.00 | 31.40 | C |
| ATOM | 5790 | CE | LYS | B | 331 | 73.692 | 41.687 | -16.715 | 1.00 | 33.06 | C |
| ATOM | 5791 | NZ | LYS | B | 331 | 74.695 | 41.389 | -17.812 | 1.00 | 33.36 | N |
| ATOM | 5792 | N | PHE | B | 332 | 69.829 | 42.924 | -12.984 | 1.00 | 30.02 | N |
| ATOM | 5793 | CA | PHE | B | 332 | 70.313 | 42.229 | -11.774 | 1.00 | 30.08 | C |
| ATOM | 5794 | C | PHE | B | 332 | 69.389 | 41.123 | -11.247 | 1.00 | 30.00 | C |
| ATOM | 5795 | O | PHE | B | 332 | 69.784 | 39.956 | -11.177 | 1.00 | 30.12 | O |
| ATOM | 5796 | CB | PHE | B | 332 | 70.623 | 43.240 | -10.658 | 1.00 | 31.25 | C |
| ATOM | 5797 | CG | PHE | B | 332 | 71.768 | 42.827 | -9.774 | 1.00 | 32.52 | C |
| ATOM | 5798 | CD1 | PHE | B | 332 | 73.079 | 43.032 | -10.175 | 1.00 | 33.80 | C |
| ATOM | 5799 | CD2 | PHE | B | 332 | 71.534 | 42.239 | -8.545 | 1.00 | 33.23 | C |
| ATOM | 5800 | CE1 | PHE | B | 332 | 74.150 | 42.661 | -9.359 | 1.00 | 34.56 | C |
| ATOM | 5801 | CE2 | PHE | B | 332 | 72.586 | 41.866 | -7.723 | 1.00 | 33.69 | C |
| ATOM | 5802 | CZ | PHE | B | 332 | 73.905 | 42.080 | -8.130 | 1.00 | 33.47 | C |
| ATOM | 5803 | N | GLN | B | 333 | 68.151 | 41.458 | -10.913 | 1.00 | 29.53 | N |
| ATOM | 5804 | CA | GLN | B | 333 | 67.246 | 40.436 | -10.386 | 1.00 | 29.82 | C |
| ATOM | 5805 | C | GLN | B | 333 | 66.914 | 39.317 | -11.392 | 1.00 | 29.90 | C |
| ATOM | 5806 | O | GLN | B | 333 | 66.835 | 38.158 | -11.017 | 1.00 | 29.80 | O |
| ATOM | 5807 | CB | GLN | B | 333 | 65.944 | 41.089 | -9.874 | 1.00 | 28.91 | C |
| ATOM | 5808 | CG | GLN | B | 333 | 66.144 | 42.014 | -8.654 | 1.00 | 28.81 | C |
| ATOM | 5809 | CD | GLN | B | 333 | 64.875 | 42.136 | -7.793 | 1.00 | 29.46 | C |
| ATOM | 5810 | OE1 | GLN | B | 333 | 63.762 | 41.826 | -8.243 | 1.00 | 29.24 | O |
| ATOM | 5811 | NE2 | GLN | B | 333 | 65.043 | 42.593 | -6.555 | 1.00 | 28.91 | N |
| ATOM | 5812 | N | LYS | B | 334 | 66.714 | 39.661 | -12.655 | 1.00 | 30.41 | N |
| ATOM | 5813 | CA | LYS | B | 334 | 66.413 | 38.645 | -13.658 | 1.00 | 31.29 | C |
| ATOM | 5814 | C | LYS | B | 334 | 67.577 | 37.658 | -13.728 | 1.00 | 31.30 | C |
| ATOM | 5815 | O | LYS | B | 334 | 67.366 | 36.451 | -13.780 | 1.00 | 31.03 | O |
| ATOM | 5816 | CB | LYS | B | 334 | 66.199 | 39.274 | -15.041 | 1.00 | 32.28 | C |
| ATOM | 5817 | CG | LYS | B | 334 | 65.718 | 38.252 | -16.078 | 1.00 | 35.08 | C |
| ATOM | 5818 | CD | LYS | B | 334 | 65.446 | 38.890 | -17.422 | 1.00 | 37.76 | C |
| ATOM | 5819 | CE | LYS | B | 334 | 65.006 | 37.824 | -18.422 | 1.00 | 39.52 | C |
| ATOM | 5820 | NZ | LYS | B | 334 | 63.748 | 37.170 | -17.961 | 1.00 | 41.35 | N |
| ATOM | 5821 | N | GLU | B | 335 | 68.797 | 38.187 | -13.717 | 1.00 | 31.89 | N |
| ATOM | 5822 | CA | GLU | B | 335 | 70.003 | 37.362 | -13.760 | 1.00 | 32.71 | C |
| ATOM | 5823 | C | GLU | B | 335 | 70.043 | 36.443 | -12.542 | 1.00 | 31.85 | C |
| ATOM | 5824 | O | GLU | B | 335 | 70.287 | 35.236 | -12.674 | 1.00 | 31.48 | O |
| ATOM | 5825 | CB | GLU | B | 335 | 71.252 | 38.238 | -13.782 | 1.00 | 34.50 | C |
| ATOM | 5826 | CG | GLU | B | 335 | 71.487 | 38.963 | -15.097 | 1.00 | 38.97 | C |
| ATOM | 5827 | CD | GLU | B | 335 | 72.221 | 38.099 | -16.128 | 1.00 | 41.01 | C |
| ATOM | 5828 | OE1 | GLU | B | 335 | 73.407 | 37.724 | -15.918 | 1.00 | 42.27 | O |
| ATOM | 5829 | OE2 | GLU | B | 335 | 71.596 | 37.796 | -17.150 | 1.00 | 42.51 | O |
| ATOM | 5830 | N | LEU | B | 336 | 69.802 | 36.994 | -11.352 | 1.00 | 30.66 | N |
| ATOM | 5831 | CA | LEU | B | 336 | 69.801 | 36.139 | -10.150 | 1.00 | 30.30 | C |
| ATOM | 5832 | C | LEU | B | 336 | 68.704 | 35.074 | -10.234 | 1.00 | 30.06 | C |
| ATOM | 5833 | O | LEU | B | 336 | 68.887 | 33.933 | -9.782 | 1.00 | 30.01 | O |
| ATOM | 5834 | CB | LEU | B | 336 | 69.568 | 36.979 | -8.873 | 1.00 | 29.90 | C |
| ATOM | 5835 | CG | LEU | B | 336 | 70.682 | 37.947 | -8.498 | 1.00 | 29.46 | C |
| ATOM | 5836 | CD1 | LEU | B | 336 | 70.263 | 38.929 | -7.376 | 1.00 | 29.26 | C |
| ATOM | 5837 | CD2 | LEU | B | 336 | 71.871 | 37.096 | -8.079 | 1.00 | 30.11 | C |
| ATOM | 5838 | N | ALA | B | 337 | 67.555 | 35.450 | -10.789 | 1.00 | 29.64 | N |
| ATOM | 5839 | CA | ALA | B | 337 | 66.447 | 34.502 | -10.876 | 1.00 | 30.65 | C |
| ATOM | 5840 | C | ALA | B | 337 | 66.896 | 33.280 | -11.687 | 1.00 | 31.25 | C |
| ATOM | 5841 | O | ALA | B | 337 | 66.535 | 32.137 | -11.359 | 1.00 | 30.39 | O |
| ATOM | 5842 | CB | ALA | B | 337 | 65.222 | 35.157 | -11.536 | 1.00 | 29.93 | C |
| ATOM | 5843 | N | ALA | B | 338 | 67.685 | 33.535 | -12.737 | 1.00 | 31.89 | N |
| ATOM | 5844 | CA | ALA | B | 338 | 68.160 | 32.447 | -13.597 | 1.00 | 32.75 | C |
| ATOM | 5845 | C | ALA | B | 338 | 69.090 | 31.532 | -12.838 | 1.00 | 33.22 | C |
| ATOM | 5846 | O | ALA | B | 338 | 69.230 | 30.359 | -13.195 | 1.00 | 33.80 | O |
| ATOM | 5847 | CB | ALA | B | 338 | 68.865 | 33.003 | -14.832 | 1.00 | 32.91 | C |
| ATOM | 5848 | N | MET | B | 339 | 69.726 | 32.045 | -11.788 | 1.00 | 32.62 | N |

| ATOM | 5849 | CA | MET | B | 339 | 70.615 | 31.196 | -11.007 | 1.00 | 32.74 | C |
|------|------|-----|-----|---|-----|--------|--------|---------|------|-------|---|
| ATOM | 5850 | C | MET | B | 339 | 69.865 | 30.372 | -9.938 | 1.00 | 32.57 | C |
| ATOM | 5851 | O | MET | B | 339 | 70.458 | 29.500 | -9.288 | 1.00 | 32.31 | O |
| ATOM | 5852 | CB | MET | B | 339 | 71.673 | 32.041 | -10.314 | 1.00 | 33.16 | C |
| ATOM | 5853 | CG | MET | B | 339 | 72.626 | 32.746 | -11.240 | 1.00 | 33.39 | C |
| ATOM | 5854 | SD | MET | B | 339 | 73.599 | 33.855 | -10.244 | 1.00 | 35.10 | S |
| ATOM | 5855 | CE | MET | B | 339 | 73.942 | 35.146 | -11.384 | 1.00 | 34.20 | C |
| ATOM | 5856 | N | GLY | B | 340 | 68.568 | 30.641 | -9.761 | 1.00 | 31.68 | N |
| ATOM | 5857 | CA | GLY | B | 340 | 67.797 | 29.931 | -8.740 | 1.00 | 30.82 | C |
| ATOM | 5858 | C | GLY | B | 340 | 67.394 | 30.774 | -7.509 | 1.00 | 30.23 | C |
| ATOM | 5859 | O | GLY | B | 340 | 66.892 | 30.243 | -6.507 | 1.00 | 30.08 | O |
| ATOM | 5860 | N | PHE | B | 341 | 67.653 | 32.073 | -7.552 | 1.00 | 29.04 | N |
| ATOM | 5861 | CA | PHE | B | 341 | 67.265 | 32.947 | -6.436 | 1.00 | 28.42 | C |
| ATOM | 5862 | C | PHE | B | 341 | 65.826 | 33.324 | -6.767 | 1.00 | 28.41 | C |
| ATOM | 5863 | O | PHE | B | 341 | 65.560 | 34.289 | -7.486 | 1.00 | 28.94 | O |
| ATOM | 5864 | CB | PHE | B | 341 | 68.197 | 34.160 | -6.384 | 1.00 | 27.06 | C |
| ATOM | 5865 | CG | PHE | B | 341 | 69.627 | 33.805 | -6.001 | 1.00 | 27.09 | C |
| ATOM | 5866 | CD1 | PHE | B | 341 | 69.975 | 33.570 | -4.668 | 1.00 | 26.48 | C |
| ATOM | 5867 | CD2 | PHE | B | 341 | 70.607 | 33.670 | -6.976 | 1.00 | 26.62 | C |
| ATOM | 5868 | CE1 | PHE | B | 341 | 71.275 | 33.212 | -4.302 | 1.00 | 26.63 | C |
| ATOM | 5869 | CE2 | PHE | B | 341 | 71.918 | 33.305 | -6.629 | 1.00 | 26.76 | C |
| ATOM | 5870 | CZ | PHE | B | 341 | 72.261 | 33.079 | -5.298 | 1.00 | 26.98 | C |
| ATOM | 5871 | N | LYS | B | 342 | 64.905 | 32.518 | -6.255 | 1.00 | 28.63 | N |
| ATOM | 5872 | CA | LYS | B | 342 | 63.478 | 32.683 | -6.524 | 1.00 | 29.04 | C |
| ATOM | 5873 | C | LYS | B | 342 | 62.737 | 33.635 | -5.586 | 1.00 | 28.40 | C |
| ATOM | 5874 | O | LYS | B | 342 | 61.640 | 34.055 | -5.901 | 1.00 | 28.48 | O |
| ATOM | 5875 | CB | LYS | B | 342 | 62.797 | 31.307 | -6.540 | 1.00 | 29.62 | C |
| ATOM | 5876 | CG | LYS | B | 342 | 63.363 | 30.390 | -7.636 | 1.00 | 31.72 | C |
| ATOM | 5877 | CD | LYS | B | 342 | 63.343 | 31.106 | -8.994 | 1.00 | 32.91 | C |
| ATOM | 5878 | CE | LYS | B | 342 | 63.700 | 30.151 | -10.142 | 1.00 | 34.44 | C |
| ATOM | 5879 | NZ | LYS | B | 342 | 63.712 | 30.881 | -11.463 | 1.00 | 36.41 | N |
| ATOM | 5880 | N | PHE | B | 343 | 63.316 | 33.952 | -4.431 | 1.00 | 28.13 | N |
| ATOM | 5881 | CA | PHE | B | 343 | 62.692 | 34.978 | -3.568 | 1.00 | 27.48 | C |
| ATOM | 5882 | C | PHE | B | 343 | 63.717 | 36.107 | -3.433 | 1.00 | 26.11 | C |
| ATOM | 5883 | O | PHE | B | 343 | 64.795 | 35.889 | -2.899 | 1.00 | 26.74 | O |
| ATOM | 5884 | CB | PHE | B | 343 | 62.341 | 34.455 | -2.171 | 1.00 | 26.74 | C |
| ATOM | 5885 | CG | PHE | B | 343 | 61.603 | 35.478 | -1.336 | 1.00 | 27.52 | C |
| ATOM | 5886 | CD1 | PHE | B | 343 | 60.354 | 35.943 | -1.745 | 1.00 | 27.56 | C |
| ATOM | 5887 | CD2 | PHE | B | 343 | 62.187 | 36.033 | -0.196 | 1.00 | 27.31 | C |
| ATOM | 5888 | CE1 | PHE | B | 343 | 59.691 | 36.966 | -1.030 | 1.00 | 27.58 | C |
| ATOM | 5889 | CE2 | PHE | B | 343 | 61.547 | 37.034 | 0.507 | 1.00 | 27.37 | C |
| ATOM | 5890 | CZ | PHE | B | 343 | 60.290 | 37.506 | 0.087 | 1.00 | 26.79 | C |
| ATOM | 5891 | N | GLN | B | 344 | 63.390 | 37.312 | -3.905 | 1.00 | 25.64 | N |
| ATOM | 5892 | CA | GLN | B | 344 | 64.324 | 38.432 | -3.835 | 1.00 | 25.23 | C |
| ATOM | 5893 | C | GLN | B | 344 | 63.650 | 39.627 | -3.169 | 1.00 | 25.32 | C |
| ATOM | 5894 | O | GLN | B | 344 | 62.456 | 39.863 | -3.338 | 1.00 | 25.60 | O |
| ATOM | 5895 | CB | GLN | B | 344 | 64.836 | 38.810 | -5.245 | 1.00 | 24.91 | C |
| ATOM | 5896 | CG | GLN | B | 344 | 65.588 | 37.643 | -5.935 | 1.00 | 26.43 | C |
| ATOM | 5897 | CD | GLN | B | 344 | 66.079 | 37.972 | -7.360 | 1.00 | 27.71 | C |
| ATOM | 5898 | OE1 | GLN | B | 344 | 66.036 | 37.107 | -8.275 | 1.00 | 29.90 | O |
| ATOM | 5899 | NE2 | GLN | B | 344 | 66.548 | 39.181 | -7.554 | 1.00 | 26.07 | N |
| ATOM | 5900 | N | PHE | B | 345 | 64.429 | 40.418 | -2.457 | 1.00 | 24.80 | N |
| ATOM | 5901 | CA | PHE | B | 345 | 63.835 | 41.527 | -1.725 | 1.00 | 25.16 | C |
| ATOM | 5902 | C | PHE | B | 345 | 64.867 | 42.593 | -1.391 | 1.00 | 25.10 | C |
| ATOM | 5903 | O | PHE | B | 345 | 66.082 | 42.362 | -1.521 | 1.00 | 25.39 | O |
| ATOM | 5904 | CB | PHE | B | 345 | 63.220 | 40.993 | -0.405 | 1.00 | 23.95 | C |
| ATOM | 5905 | CG | PHE | B | 345 | 64.159 | 40.109 | 0.414 | 1.00 | 23.96 | C |
| ATOM | 5906 | CD1 | PHE | B | 345 | 64.412 | 38.775 | 0.033 | 1.00 | 23.94 | C |
| ATOM | 5907 | CD2 | PHE | B | 345 | 64.818 | 40.615 | 1.526 | 1.00 | 23.71 | C |
| ATOM | 5908 | CE1 | PHE | B | 345 | 65.320 | 37.970 | 0.760 | 1.00 | 24.75 | C |
| ATOM | 5909 | CE2 | PHE | B | 345 | 65.736 | 39.822 | 2.270 | 1.00 | 24.07 | C |
| ATOM | 5910 | CZ | PHE | B | 345 | 65.984 | 38.513 | 1.891 | 1.00 | 25.40 | C |
| ATOM | 5911 | N | ILE | B | 346 | 64.362 | 43.766 | -1.013 | 1.00 | 24.59 | N |
| ATOM | 5912 | CA | ILE | B | 346 | 65.208 | 44.870 | -0.550 | 1.00 | 24.19 | C |
| ATOM | 5913 | C | ILE | B | 346 | 64.707 | 45.075 | 0.881 | 1.00 | 24.02 | C |
| ATOM | 5914 | O | ILE | B | 346 | 63.596 | 45.578 | 1.099 | 1.00 | 23.75 | O |
| ATOM | 5915 | CB | ILE | B | 346 | 64.967 | 46.162 | -1.324 | 1.00 | 23.64 | C |
| ATOM | 5916 | CG1 | ILE | B | 346 | 65.338 | 45.959 | -2.805 | 1.00 | 24.88 | C |
| ATOM | 5917 | CG2 | ILE | B | 346 | 65.867 | 47.265 | -0.746 | 1.00 | 22.22 | C |
| ATOM | 5918 | CD1 | ILE | B | 346 | 64.997 | 47.184 | -3.687 | 1.00 | 24.33 | C |
| ATOM | 5919 | N | THR | B | 347 | 65.510 | 44.664 | 1.844 | 1.00 | 24.28 | N |
| ATOM | 5920 | CA | THR | B | 347 | 65.141 | 44.740 | 3.261 | 1.00 | 24.27 | C |
| ATOM | 5921 | C | THR | B | 347 | 64.666 | 46.104 | 3.770 | 1.00 | 24.51 | C |
| ATOM | 5922 | O | THR | B | 347 | 63.623 | 46.193 | 4.398 | 1.00 | 23.66 | O |
| ATOM | 5923 | CB | THR | B | 347 | 66.350 | 44.332 | 4.166 | 1.00 | 24.60 | C |
| ATOM | 5924 | OG1 | THR | B | 347 | 67.494 | 45.122 | 3.799 | 1.00 | 23.32 | O |
| ATOM | 5925 | CG2 | THR | B | 347 | 66.695 | 42.822 | 3.984 | 1.00 | 24.13 | C |
| ATOM | 5926 | N | LEU | B | 348 | 65.422 | 47.162 | 3.471 | 1.00 | 24.23 | N |
| ATOM | 5927 | CA | LEU | B | 348 | 65.095 | 48.467 | 4.022 | 1.00 | 24.03 | C |
| ATOM | 5928 | C | LEU | B | 348 | 64.362 | 49.425 | 3.098 | 1.00 | 23.79 | C |

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ATOM   5929  O    LEU B 348      64.434  50.654   3.269  1.00 23.61           O
ATOM   5930  CB   LEU B 348      66.394  49.105   4.532  1.00 24.61           C
ATOM   5931  CG   LEU B 348      67.266  48.172   5.411  1.00 25.42           C
ATOM   5932  CD1  LEU B 348      68.352  49.017   6.148  1.00 24.77           C
ATOM   5933  CD2  LEU B 348      66.406  47.457   6.458  1.00 23.63           C
ATOM   5934  N    ALA B 349      63.614  48.886   2.148  1.00 23.53           N
ATOM   5935  CA   ALA B 349      62.917  49.769   1.207  1.00 24.07           C
ATOM   5936  C    ALA B 349      61.951  50.690   1.928  1.00 23.23           C
ATOM   5937  O    ALA B 349      61.842  51.863   1.573  1.00 22.85           O
ATOM   5938  CB   ALA B 349      62.148  48.948   0.141  1.00 23.00           C
ATOM   5939  N    GLY B 350      61.247  50.167   2.935  1.00 23.12           N
ATOM   5940  CA   GLY B 350      60.266  51.000   3.646  1.00 22.46           C
ATOM   5941  C    GLY B 350      60.937  52.092   4.477  1.00 23.24           C
ATOM   5942  O    GLY B 350      60.498  53.245   4.503  1.00 23.42           O
ATOM   5943  N    PHE B 351      61.991  51.718   5.188  1.00 22.88           N
ATOM   5944  CA   PHE B 351      62.757  52.672   5.981  1.00 23.29           C
ATOM   5945  C    PHE B 351      63.232  53.841   5.080  1.00 23.34           C
ATOM   5946  O    PHE B 351      63.149  55.009   5.462  1.00 24.30           O
ATOM   5947  CB   PHE B 351      63.965  51.972   6.593  1.00 23.12           C
ATOM   5948  CG   PHE B 351      64.968  52.927   7.217  1.00 24.11           C
ATOM   5949  CD1  PHE B 351      64.797  53.379   8.516  1.00 24.12           C
ATOM   5950  CD2  PHE B 351      66.109  53.332   6.495  1.00 24.50           C
ATOM   5951  CE1  PHE B 351      65.752  54.216   9.131  1.00 24.56           C
ATOM   5952  CE2  PHE B 351      67.069  54.172   7.076  1.00 25.71           C
ATOM   5953  CZ   PHE B 351      66.882  54.615   8.423  1.00 25.23           C
ATOM   5954  N    HIS B 352      63.722  53.537   3.881  1.00 23.40           N
ATOM   5955  CA   HIS B 352      64.184  54.628   3.000  1.00 23.23           C
ATOM   5956  C    HIS B 352      63.061  55.441   2.423  1.00 23.07           C
ATOM   5957  O    HIS B 352      63.148  56.659   2.400  1.00 23.66           O
ATOM   5958  CB   HIS B 352      65.094  54.097   1.885  1.00 22.67           C
ATOM   5959  CG   HIS B 352      66.456  53.716   2.389  1.00 23.68           C
ATOM   5960  ND1  HIS B 352      67.341  54.652   2.885  1.00 22.95           N
ATOM   5961  CD2  HIS B 352      67.039  52.504   2.571  1.00 22.65           C
ATOM   5962  CE1  HIS B 352      68.412  54.034   3.356  1.00 23.80           C
ATOM   5963  NE2  HIS B 352      68.250  52.730   3.184  1.00 23.96           N
ATOM   5964  N    ALA B 353      61.992  54.795   1.976  1.00 22.48           N
ATOM   5965  CA   ALA B 353      60.895  55.570   1.424  1.00 23.04           C
ATOM   5966  C    ALA B 353      60.261  56.470   2.486  1.00 23.06           C
ATOM   5967  O    ALA B 353      59.918  57.635   2.211  1.00 23.68           O
ATOM   5968  CB   ALA B 353      59.847  54.633   0.818  1.00 23.12           C
ATOM   5969  N    LEU B 354      60.104  55.944   3.704  1.00 22.76           N
ATOM   5970  CA   LEU B 354      59.464  56.703   4.800  1.00 22.11           C
ATOM   5971  C    LEU B 354      60.336  57.865   5.265  1.00 22.13           C
ATOM   5972  O    LEU B 354      59.877  59.020   5.361  1.00 22.98           O
ATOM   5973  CB   LEU B 354      59.136  55.770   6.000  1.00 20.69           C
ATOM   5974  CG   LEU B 354      58.426  56.402   7.222  1.00 22.01           C
ATOM   5975  CD1  LEU B 354      57.739  55.298   8.071  1.00 22.02           C
ATOM   5976  CD2  LEU B 354      59.444  57.192   8.103  1.00 22.04           C
ATOM   5977  N    ASN B 355      61.592  57.583   5.561  1.00 22.45           N
ATOM   5978  CA   ASN B 355      62.481  58.667   5.999  1.00 22.52           C
ATOM   5979  C    ASN B 355      62.683  59.702   4.889  1.00 23.16           C
ATOM   5980  O    ASN B 355      62.571  60.905   5.141  1.00 23.45           O
ATOM   5981  CB   ASN B 355      63.822  58.096   6.466  1.00 22.37           C
ATOM   5982  CG   ASN B 355      63.739  57.541   7.893  1.00 23.78           C
ATOM   5983  OD1  ASN B 355      63.905  58.296   8.874  1.00 24.71           O
ATOM   5984  ND2  ASN B 355      63.450  56.233   8.020  1.00 21.28           N
ATOM   5985  N    TYR B 356      62.949  59.260   3.663  1.00 23.31           N
ATOM   5986  CA   TYR B 356      63.176  60.246   2.606  1.00 24.32           C
ATOM   5987  C    TYR B 356      61.946  61.101   2.281  1.00 24.62           C
ATOM   5988  O    TYR B 356      62.043  62.340   2.190  1.00 24.19           O
ATOM   5989  CB   TYR B 356      63.679  59.591   1.298  1.00 24.61           C
ATOM   5990  CG   TYR B 356      63.820  60.640   0.194  1.00 26.46           C
ATOM   5991  CD1  TYR B 356      64.852  61.597   0.244  1.00 26.70           C
ATOM   5992  CD2  TYR B 356      62.858  60.758  -0.809  1.00 26.38           C
ATOM   5993  CE1  TYR B 356      64.908  62.666  -0.685  1.00 27.75           C
ATOM   5994  CE2  TYR B 356      62.896  61.825  -1.748  1.00 27.94           C
ATOM   5995  CZ   TYR B 356      63.930  62.773  -1.664  1.00 28.62           C
ATOM   5996  OH   TYR B 356      63.958  63.855  -2.516  1.00 29.50           O
ATOM   5997  N    SER B 357      60.785  60.466   2.102  1.00 24.05           N
ATOM   5998  CA   SER B 357      59.609  61.260   1.769  1.00 24.38           C
ATOM   5999  C    SER B 357      59.276  62.293   2.845  1.00 25.14           C
ATOM   6000  O    SER B 357      58.914  63.435   2.506  1.00 25.21           O
ATOM   6001  CB   SER B 357      58.376  60.376   1.478  1.00 24.30           C
ATOM   6002  OG   SER B 357      58.061  59.522   2.563  1.00 23.52           O
ATOM   6003  N    MET B 358      59.414  61.937   4.129  1.00 24.58           N
ATOM   6004  CA   MET B 358      59.100  62.922   5.162  1.00 24.71           C
ATOM   6005  C    MET B 358      60.191  63.992   5.234  1.00 24.72           C
ATOM   6006  O    MET B 358      59.890  65.179   5.414  1.00 25.48           O
ATOM   6007  CB   MET B 358      58.900  62.287   6.553  1.00 24.29           C
ATOM   6008  CG   MET B 358      58.449  63.327   7.616  1.00 23.17           C
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| ATOM | 6009 | SD | MET B 358 | 57.007 | 64.371 | 7.087 | 1.00 | 25.03 | S |
|------|------|------|-----------|--------|--------|-------|------|-------|---|
| ATOM | 6010 | CE | MET B 358 | 55.693 | 63.091 | 6.935 | 1.00 | 25.43 | C |
| ATOM | 6011 | N | PHE B 359 | 61.452 | 63.599 | 5.121 | 1.00 | 25.10 | N |
| ATOM | 6012 | CA | PHE B 359 | 62.494 | 64.644 | 5.132 | 1.00 | 25.91 | C |
| ATOM | 6013 | C | PHE B 359 | 62.265 | 65.644 | 3.976 | 1.00 | 25.65 | C |
| ATOM | 6014 | O | PHE B 359 | 62.313 | 66.857 | 4.160 | 1.00 | 25.77 | O |
| ATOM | 6015 | CB | PHE B 359 | 63.904 | 64.084 | 4.954 | 1.00 | 25.85 | C |
| ATOM | 6016 | CG | PHE B 359 | 64.968 | 65.177 | 4.901 | 1.00 | 26.80 | C |
| ATOM | 6017 | CD1 | PHE B 359 | 65.467 | 65.738 | 6.078 | 1.00 | 26.88 | C |
| ATOM | 6018 | CD2 | PHE B 359 | 65.366 | 65.729 | 3.668 | 1.00 | 27.63 | C |
| ATOM | 6019 | CE1 | PHE B 359 | 66.351 | 66.857 | 6.047 | 1.00 | 27.29 | C |
| ATOM | 6020 | CE2 | PHE B 359 | 66.239 | 66.832 | 3.621 | 1.00 | 27.01 | C |
| ATOM | 6021 | CZ | PHE B 359 | 66.728 | 67.396 | 4.818 | 1.00 | 27.31 | C |
| ATOM | 6022 | N | ASP B 360 | 61.988 | 65.131 | 2.790 | 1.00 | 25.81 | N |
| ATOM | 6023 | CA | ASP B 360 | 61.816 | 66.020 | 1.623 | 1.00 | 26.19 | C |
| ATOM | 6024 | C | ASP B 360 | 60.643 | 66.968 | 1.788 | 1.00 | 26.67 | C |
| ATOM | 6025 | O | ASP B 360 | 60.755 | 68.181 | 1.532 | 1.00 | 26.21 | O |
| ATOM | 6026 | CB | ASP B 360 | 61.633 | 65.177 | 0.368 | 1.00 | 26.04 | C |
| ATOM | 6027 | CG | ASP B 360 | 61.682 | 66.013 | -0.909 | 1.00 | 26.42 | C |
| ATOM | 6028 | OD1 | ASP B 360 | 62.680 | 66.707 | -1.108 | 1.00 | 26.46 | O |
| ATOM | 6029 | OD2 | ASP B 360 | 60.730 | 65.975 | -1.687 | 1.00 | 26.10 | O |
| ATOM | 6030 | N | LEU B 361 | 59.501 | 66.419 | 2.215 | 1.00 | 25.88 | N |
| ATOM | 6031 | CA | LEU B 361 | 58.313 | 67.223 | 2.419 | 1.00 | 25.49 | C |
| ATOM | 6032 | C | LEU B 361 | 58.550 | 68.241 | 3.531 | 1.00 | 25.99 | C |
| ATOM | 6033 | O | LEU B 361 | 58.265 | 69.433 | 3.375 | 1.00 | 26.95 | O |
| ATOM | 6034 | CB | LEU B 361 | 57.104 | 66.339 | 2.800 | 1.00 | 25.08 | C |
| ATOM | 6035 | CG | LEU B 361 | 55.814 | 67.095 | 3.155 | 1.00 | 25.72 | C |
| ATOM | 6036 | CD1 | LEU B 361 | 55.298 | 67.881 | 1.921 | 1.00 | 25.23 | C |
| ATOM | 6037 | CD2 | LEU B 361 | 54.705 | 66.100 | 3.597 | 1.00 | 24.94 | C |
| ATOM | 6038 | N | ALA B 362 | 59.087 | 67.780 | 4.647 | 1.00 | 25.46 | N |
| ATOM | 6039 | CA | ALA B 362 | 59.278 | 68.670 | 5.773 | 1.00 | 26.32 | C |
| ATOM | 6040 | C | ALA B 362 | 60.275 | 69.798 | 5.458 | 1.00 | 26.86 | C |
| ATOM | 6041 | O | ALA B 362 | 60.103 | 70.940 | 5.896 | 1.00 | 26.12 | O |
| ATOM | 6042 | CB | ALA B 362 | 59.755 | 67.895 | 6.970 | 1.00 | 25.36 | C |
| ATOM | 6043 | N | TYR B 363 | 61.322 | 69.458 | 4.734 | 1.00 | 27.35 | N |
| ATOM | 6044 | CA | TYR B 363 | 62.319 | 70.467 | 4.405 | 1.00 | 29.41 | C |
| ATOM | 6045 | C | TYR B 363 | 61.678 | 71.549 | 3.518 | 1.00 | 29.20 | C |
| ATOM | 6046 | O | TYR B 363 | 61.835 | 72.749 | 3.776 | 1.00 | 29.52 | O |
| ATOM | 6047 | CB | TYR B 363 | 63.510 | 69.813 | 3.711 | 1.00 | 30.03 | C |
| ATOM | 6048 | CG | TYR B 363 | 64.586 | 70.814 | 3.366 | 1.00 | 32.63 | C |
| ATOM | 6049 | CD1 | TYR B 363 | 64.528 | 71.542 | 2.173 | 1.00 | 33.64 | C |
| ATOM | 6050 | CD2 | TYR B 363 | 65.631 | 71.069 | 4.245 | 1.00 | 33.53 | C |
| ATOM | 6051 | CE1 | TYR B 363 | 65.487 | 72.506 | 1.866 | 1.00 | 35.26 | C |
| ATOM | 6052 | CE2 | TYR B 363 | 66.601 | 72.034 | 3.946 | 1.00 | 35.15 | C |
| ATOM | 6053 | CZ | TYR B 363 | 66.517 | 72.744 | 2.752 | 1.00 | 35.78 | C |
| ATOM | 6054 | OH | TYR B 363 | 67.487 | 73.677 | 2.426 | 1.00 | 38.20 | O |
| ATOM | 6055 | N | GLY B 364 | 60.927 | 71.111 | 2.504 | 1.00 | 28.67 | N |
| ATOM | 6056 | CA | GLY B 364 | 60.255 | 72.051 | 1.622 | 1.00 | 28.27 | C |
| ATOM | 6057 | C | GLY B 364 | 59.220 | 72.868 | 2.385 | 1.00 | 28.81 | C |
| ATOM | 6058 | O | GLY B 364 | 59.029 | 74.068 | 2.133 | 1.00 | 28.14 | O |
| ATOM | 6059 | N | TYR B 365 | 58.550 | 72.219 | 3.338 | 1.00 | 28.03 | N |
| ATOM | 6060 | CA | TYR B 365 | 57.532 | 72.885 | 4.137 | 1.00 | 27.92 | C |
| ATOM | 6061 | C | TYR B 365 | 58.186 | 73.903 | 5.063 | 1.00 | 28.15 | C |
| ATOM | 6062 | O | TYR B 365 | 57.649 | 74.991 | 5.227 | 1.00 | 28.03 | O |
| ATOM | 6063 | CB | TYR B 365 | 56.748 | 71.829 | 4.946 | 1.00 | 27.86 | C |
| ATOM | 6064 | CG | TYR B 365 | 55.597 | 72.306 | 5.801 | 1.00 | 27.18 | C |
| ATOM | 6065 | CD1 | TYR B 365 | 54.392 | 72.731 | 5.236 | 1.00 | 27.17 | C |
| ATOM | 6066 | CD2 | TYR B 365 | 55.673 | 72.216 | 7.196 | 1.00 | 27.77 | C |
| ATOM | 6067 | CE1 | TYR B 365 | 53.286 | 73.036 | 6.031 | 1.00 | 25.95 | C |
| ATOM | 6068 | CE2 | TYR B 365 | 54.569 | 72.522 | 8.006 | 1.00 | 27.32 | C |
| ATOM | 6069 | CZ | TYR B 365 | 53.377 | 72.922 | 7.405 | 1.00 | 27.43 | C |
| ATOM | 6070 | OH | TYR B 365 | 52.269 | 73.136 | 8.215 | 1.00 | 28.15 | O |
| ATOM | 6071 | N | ALA B 366 | 59.324 | 73.563 | 5.674 | 1.00 | 28.24 | N |
| ATOM | 6072 | CA | ALA B 366 | 59.989 | 74.517 | 6.558 | 1.00 | 29.98 | C |
| ATOM | 6073 | C | ALA B 366 | 60.382 | 75.781 | 5.748 | 1.00 | 31.70 | C |
| ATOM | 6074 | O | ALA B 366 | 60.366 | 76.898 | 6.277 | 1.00 | 31.88 | O |
| ATOM | 6075 | CB | ALA B 366 | 61.260 | 73.902 | 7.184 | 1.00 | 29.34 | C |
| ATOM | 6076 | N | GLN B 367 | 60.709 | 75.587 | 4.472 | 1.00 | 32.58 | N |
| ATOM | 6077 | CA | GLN B 367 | 61.131 | 76.687 | 3.611 | 1.00 | 34.58 | C |
| ATOM | 6078 | C | GLN B 367 | 59.986 | 77.438 | 2.946 | 1.00 | 34.56 | C |
| ATOM | 6079 | O | GLN B 367 | 59.963 | 78.653 | 2.998 | 1.00 | 35.11 | O |
| ATOM | 6080 | CB | GLN B 367 | 62.061 | 76.175 | 2.494 | 1.00 | 35.71 | C |
| ATOM | 6081 | CG | GLN B 367 | 63.283 | 75.395 | 2.925 | 1.00 | 39.30 | C |
| ATOM | 6082 | CD | GLN B 367 | 64.230 | 76.210 | 3.787 | 1.00 | 42.02 | C |
| ATOM | 6083 | OE1 | GLN B 367 | 64.533 | 77.370 | 3.473 | 1.00 | 43.75 | O |
| ATOM | 6084 | NE2 | GLN B 367 | 64.714 | 75.612 | 4.872 | 1.00 | 42.91 | N |
| ATOM | 6085 | N | ASN B 368 | 59.028 | 76.722 | 2.347 | 1.00 | 34.52 | N |
| ATOM | 6086 | CA | ASN B 368 | 57.934 | 77.356 | 1.589 | 1.00 | 33.98 | C |
| ATOM | 6087 | C | ASN B 368 | 56.493 | 77.004 | 1.988 | 1.00 | 33.35 | C |
| ATOM | 6088 | O | ASN B 368 | 55.556 | 77.248 | 1.223 | 1.00 | 32.09 | O |

| ATOM | 6089 | CB | ASN | B | 368 | 58.123 | 77.017 | 0.096 | 1.00 | 35.80 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 6090 | CG | ASN | B | 368 | 59.522 | 77.394 | -0.416 | 1.00 | 37.83 | C |
| ATOM | 6091 | OD1 | ASN | B | 368 | 60.262 | 76.555 | -0.959 | 1.00 | 38.99 | O |
| ATOM | 6092 | ND2 | ASN | B | 368 | 59.888 | 78.650 | -0.229 | 1.00 | 38.01 | N |
| ATOM | 6093 | N | GLN | B | 369 | 56.325 | 76.427 | 3.175 | 1.00 | 32.56 | N |
| ATOM | 6094 | CA | GLN | B | 369 | 55.009 | 76.058 | 3.661 | 1.00 | 31.97 | C |
| ATOM | 6095 | C | GLN | B | 369 | 54.100 | 75.322 | 2.676 | 1.00 | 30.88 | C |
| ATOM | 6096 | O | GLN | B | 369 | 54.523 | 74.306 | 2.120 | 1.00 | 30.06 | O |
| ATOM | 6097 | CB | GLN | B | 369 | 54.316 | 77.281 | 4.266 | 1.00 | 33.06 | C |
| ATOM | 6098 | CG | GLN | B | 369 | 55.119 | 77.869 | 5.448 | 1.00 | 34.58 | C |
| ATOM | 6099 | CD | GLN | B | 369 | 56.127 | 78.938 | 5.003 | 1.00 | 36.03 | C |
| ATOM | 6100 | OE1 | GLN | B | 369 | 55.743 | 79.899 | 4.338 | 1.00 | 37.20 | O |
| ATOM | 6101 | NE2 | GLN | B | 369 | 57.395 | 78.783 | 5.375 | 1.00 | 35.26 | N |
| ATOM | 6102 | N | MET | B | 370 | 52.877 | 75.802 | 2.443 | 1.00 | 29.80 | N |
| ATOM | 6103 | CA | MET | B | 370 | 51.959 | 75.047 | 1.589 | 1.00 | 29.82 | C |
| ATOM | 6104 | C | MET | B | 370 | 52.428 | 74.645 | 0.200 | 1.00 | 30.17 | C |
| ATOM | 6105 | O | MET | B | 370 | 51.989 | 73.619 | -0.334 | 1.00 | 30.02 | O |
| ATOM | 6106 | CB | MET | B | 370 | 50.593 | 75.748 | 1.490 | 1.00 | 30.13 | C |
| ATOM | 6107 | CG | MET | B | 370 | 49.866 | 75.855 | 2.846 | 1.00 | 29.08 | C |
| ATOM | 6108 | SD | MET | B | 370 | 49.818 | 74.233 | 3.694 | 1.00 | 30.19 | S |
| ATOM | 6109 | CE | MET | B | 370 | 48.947 | 73.269 | 2.492 | 1.00 | 28.01 | C |
| ATOM | 6110 | N | SER | B | 371 | 53.336 | 75.424 | -0.383 | 1.00 | 30.04 | N |
| ATOM | 6111 | CA | SER | B | 371 | 53.862 | 75.106 | -1.710 | 1.00 | 29.67 | C |
| ATOM | 6112 | C | SER | B | 371 | 54.467 | 73.698 | -1.772 | 1.00 | 29.29 | C |
| ATOM | 6113 | O | SER | B | 371 | 54.288 | 72.973 | -2.759 | 1.00 | 29.66 | O |
| ATOM | 6114 | CB | SER | B | 371 | 54.922 | 76.149 | -2.100 | 1.00 | 29.91 | C |
| ATOM | 6115 | OG | SER | B | 371 | 54.320 | 77.439 | -2.116 | 1.00 | 30.88 | O |
| ATOM | 6116 | N | ALA | B | 372 | 55.191 | 73.323 | -0.729 | 1.00 | 28.79 | N |
| ATOM | 6117 | CA | ALA | B | 372 | 55.836 | 71.996 | -0.650 | 1.00 | 29.05 | C |
| ATOM | 6118 | C | ALA | B | 372 | 54.820 | 70.865 | -0.590 | 1.00 | 29.23 | C |
| ATOM | 6119 | O | ALA | B | 372 | 55.025 | 69.812 | -1.193 | 1.00 | 30.09 | O |
| ATOM | 6120 | CB | ALA | B | 372 | 56.708 | 71.925 | 0.567 | 1.00 | 27.41 | C |
| ATOM | 6121 | N | TYR | B | 373 | 53.744 | 71.063 | 0.176 | 1.00 | 29.69 | N |
| ATOM | 6122 | CA | TYR | B | 373 | 52.715 | 70.029 | 0.277 | 1.00 | 29.65 | C |
| ATOM | 6123 | C | TYR | B | 373 | 52.009 | 69.911 | -1.076 | 1.00 | 30.33 | C |
| ATOM | 6124 | O | TYR | B | 373 | 51.734 | 68.798 | -1.554 | 1.00 | 29.78 | O |
| ATOM | 6125 | CB | TYR | B | 373 | 51.678 | 70.367 | 1.354 | 1.00 | 29.56 | C |
| ATOM | 6126 | CG | TYR | B | 373 | 50.579 | 69.310 | 1.426 | 1.00 | 30.13 | C |
| ATOM | 6127 | CD1 | TYR | B | 373 | 50.843 | 68.027 | 1.902 | 1.00 | 29.47 | C |
| ATOM | 6128 | CD2 | TYR | B | 373 | 49.309 | 69.579 | 0.947 | 1.00 | 30.44 | C |
| ATOM | 6129 | CE1 | TYR | B | 373 | 49.848 | 67.033 | 1.882 | 1.00 | 30.43 | C |
| ATOM | 6130 | CE2 | TYR | B | 373 | 48.317 | 68.610 | 0.925 | 1.00 | 31.35 | C |
| ATOM | 6131 | CZ | TYR | B | 373 | 48.602 | 67.334 | 1.395 | 1.00 | 30.50 | C |
| ATOM | 6132 | OH | TYR | B | 373 | 47.609 | 66.396 | 1.342 | 1.00 | 31.03 | O |
| ATOM | 6133 | N | VAL | B | 374 | 51.709 | 71.060 | -1.703 | 1.00 | 30.28 | N |
| ATOM | 6134 | CA | VAL | B | 374 | 51.048 | 71.023 | -3.007 | 1.00 | 30.69 | C |
| ATOM | 6135 | C | VAL | B | 374 | 51.855 | 70.203 | -4.009 | 1.00 | 29.98 | C |
| ATOM | 6136 | O | VAL | B | 374 | 51.283 | 69.482 | -4.826 | 1.00 | 29.77 | O, |
| ATOM | 6137 | CB | VAL | B | 374 | 50.769 | 72.459 | -3.527 | 1.00 | 30.80 | C |
| ATOM | 6138 | CG1 | VAL | B | 374 | 50.245 | 72.429 | -4.958 | 1.00 | 32.56 | C |
| ATOM | 6139 | CG2 | VAL | B | 374 | 49.739 | 73.099 | -2.623 | 1.00 | 31.70 | C |
| ATOM | 6140 | N | GLU | B | 375 | 53.179 | 70.270 | -3.930 | 1.00 | 30.50 | N |
| ATOM | 6141 | CA | GLU | B | 375 | 54.009 | 69.483 | -4.842 | 1.00 | 31.21 | C |
| ATOM | 6142 | C | GLU | B | 375 | 53.764 | 67.981 | -4.687 | 1.00 | 30.13 | C |
| ATOM | 6143 | O | GLU | B | 375 | 53.700 | 67.239 | -5.678 | 1.00 | 28.80 | O |
| ATOM | 6144 | CB | GLU | B | 375 | 55.489 | 69.763 | -4.604 | 1.00 | 34.57 | C |
| ATOM | 6145 | CG | GLU | B | 375 | 56.007 | 70.955 | -5.413 | 1.00 | 39.55 | C |
| ATOM | 6146 | CD | GLU | B | 375 | 57.456 | 71.316 | -5.090 | 1.00 | 42.77 | C |
| ATOM | 6147 | OE1 | GLU | B | 375 | 58.288 | 70.386 | -4.964 | 1.00 | 44.49 | O |
| ATOM | 6148 | OE2 | GLU | B | 375 | 57.768 | 72.538 | -4.978 | 1.00 | 45.65 | O |
| ATOM | 6149 | N | LEU | B | 376 | 53.638 | 67.533 | -3.436 | 1.00 | 28.74 | N |
| ATOM | 6150 | CA | LEU | B | 376 | 53.389 | 66.124 | -3.153 | 1.00 | 28.13 | C |
| ATOM | 6151 | C | LEU | B | 376 | 51.968 | 65.804 | -3.607 | 1.00 | 28.19 | C |
| ATOM | 6152 | O | LEU | B | 376 | 51.728 | 64.810 | -4.290 | 1.00 | 27.72 | O |
| ATOM | 6153 | CB | LEU | B | 376 | 53.524 | 65.864 | -1.647 | 1.00 | 28.28 | C |
| ATOM | 6154 | CG | LEU | B | 376 | 52.918 | 64.542 | -1.138 | 1.00 | 28.15 | C |
| ATOM | 6155 | CD1 | LEU | B | 376 | 53.617 | 63.371 | -1.832 | 1.00 | 26.78 | C |
| ATOM | 6156 | CD2 | LEU | B | 376 | 53.072 | 64.465 | 0.399 | 1.00 | 27.21 | C |
| ATOM | 6157 | N | GLN | B | 377 | 51.017 | 66.668 | -3.260 | 1.00 | 27.98 | N |
| ATOM | 6158 | CA | GLN | B | 377 | 49.646 | 66.404 | -3.673 | 1.00 | 28.77 | C |
| ATOM | 6159 | C | GLN | B | 377 | 49.532 | 66.250 | -5.202 | 1.00 | 29.45 | C |
| ATOM | 6160 | O | GLN | B | 377 | 48.813 | 65.355 | -5.715 | 1.00 | 29.36 | O |
| ATOM | 6161 | CB | GLN | B | 377 | 48.716 | 67.510 | -3.191 | 1.00 | 29.01 | C |
| ATOM | 6162 | CG | GLN | B | 377 | 47.279 | 67.220 | -3.541 | 1.00 | 30.03 | C |
| ATOM | 6163 | CD | GLN | B | 377 | 46.333 | 68.208 | -2.913 | 1.00 | 31.40 | C |
| ATOM | 6164 | OE1 | GLN | B | 377 | 45.538 | 67.866 | -2.009 | 1.00 | 31.50 | O |
| ATOM | 6165 | NE2 | GLN | B | 377 | 46.407 | 69.451 | -3.375 | 1.00 | 30.61 | N |
| ATOM | 6166 | N | GLU | B | 378 | 50.242 | 67.099 | -5.943 | 1.00 | 30.07 | N |
| ATOM | 6167 | CA | GLU | B | 378 | 50.181 | 66.997 | -7.406 | 1.00 | 30.57 | C |
| ATOM | 6168 | C | GLU | B | 378 | 50.768 | 65.666 | -7.880 | 1.00 | 30.71 | C |

| ATOM | 6169 | O   | GLU | B | 378 | 50.242 | 65.053 | -8.825  | 1.00 | 30.63 | O |
| ATOM | 6170 | CB  | GLU | B | 378 | 50.892 | 68.198 | -8.067  | 1.00 | 31.11 | C |
| ATOM | 6171 | CG  | GLU | B | 378 | 50.103 | 69.526 | -7.923  | 1.00 | 33.10 | C |
| ATOM | 6172 | CD  | GLU | B | 378 | 48.759 | 69.484 | -8.673  | 1.00 | 34.74 | C |
| ATOM | 6173 | OE1 | GLU | B | 378 | 48.795 | 69.203 | -9.886  | 1.00 | 37.15 | O |
| ATOM | 6174 | OE2 | GLU | B | 378 | 47.678 | 69.709 | -8.080  | 1.00 | 34.86 | O |
| ATOM | 6175 | N   | ARG | B | 379 | 51.843 | 65.197 | -7.245  | 1.00 | 30.42 | N |
| ATOM | 6176 | CA  | ARG | B | 379 | 52.393 | 63.895 | -7.658  | 1.00 | 31.19 | C |
| ATOM | 6177 | C   | ARG | B | 379 | 51.365 | 62.783 | -7.392  | 1.00 | 30.43 | C |
| ATOM | 6178 | O   | ARG | B | 379 | 51.240 | 61.823 | -8.163  | 1.00 | 29.61 | O |
| ATOM | 6179 | CB  | ARG | B | 379 | 53.665 | 63.557 | -6.889  | 1.00 | 32.77 | C |
| ATOM | 6180 | CG  | ARG | B | 379 | 54.933 | 64.205 | -7.411  | 1.00 | 35.83 | C |
| ATOM | 6181 | CD  | ARG | B | 379 | 56.096 | 63.767 | -6.514  | 1.00 | 39.13 | C |
| ATOM | 6182 | NE  | ARG | B | 379 | 56.830 | 64.926 | -6.036  | 1.00 | 42.86 | N |
| ATOM | 6183 | CZ  | ARG | B | 379 | 57.197 | 65.151 | -4.772  | 1.00 | 44.47 | C |
| ATOM | 6184 | NH1 | ARG | B | 379 | 56.915 | 64.288 | -3.771  | 1.00 | 44.20 | N |
| ATOM | 6185 | NH2 | ARG | B | 379 | 57.850 | 66.286 | -4.505  | 1.00 | 46.34 | N |
| ATOM | 6186 | N   | GLU | B | 380 | 50.645 | 62.900 | -6.276  | 1.00 | 29.45 | N |
| ATOM | 6187 | CA  | GLU | B | 380 | 49.639 | 61.910 | -5.939  | 1.00 | 29.04 | C |
| ATOM | 6188 | C   | GLU | B | 380 | 48.525 | 61.935 | -6.985  | 1.00 | 29.52 | C |
| ATOM | 6189 | O   | GLU | B | 380 | 48.066 | 60.879 | -7.433  | 1.00 | 29.65 | O |
| ATOM | 6190 | CB  | GLU | B | 380 | 49.057 | 62.194 | -4.555  | 1.00 | 28.05 | C |
| ATOM | 6191 | CG  | GLU | B | 380 | 49.987 | 61.796 | -3.415  | 1.00 | 26.84 | C |
| ATOM | 6192 | CD  | GLU | B | 380 | 49.314 | 61.996 | -2.062  | 1.00 | 27.28 | C |
| ATOM | 6193 | OE1 | GLU | B | 380 | 49.335 | 63.157 | -1.598  | 1.00 | 28.00 | O |
| ATOM | 6194 | OE2 | GLU | B | 380 | 48.766 | 61.023 | -1.485  | 1.00 | 25.21 | O |
| ATOM | 6195 | N   | PHE | B | 381 | 48.075 | 63.130 | -7.375  | 1.00 | 29.53 | N |
| ATOM | 6196 | CA  | PHE | B | 381 | 47.035 | 63.184 | -8.407  | 1.00 | 30.67 | C |
| ATOM | 6197 | C   | PHE | B | 381 | 47.543 | 62.496 | -9.689  | 1.00 | 30.49 | C |
| ATOM | 6198 | O   | PHE | B | 381 | 46.809 | 61.744 | -10.323 | 1.00 | 29.73 | O |
| ATOM | 6199 | CB  | PHE | B | 381 | 46.648 | 64.625 | -8.738  | 1.00 | 31.52 | C |
| ATOM | 6200 | CG  | PHE | B | 381 | 45.901 | 65.345 | -7.628  | 1.00 | 32.60 | C |
| ATOM | 6201 | CD1 | PHE | B | 381 | 45.000 | 64.667 | -6.805  | 1.00 | 33.08 | C |
| ATOM | 6202 | CD2 | PHE | B | 381 | 46.075 | 66.715 | -7.438  | 1.00 | 33.37 | C |
| ATOM | 6203 | CE1 | PHE | B | 381 | 44.285 | 65.334 | -5.807  | 1.00 | 33.10 | C |
| ATOM | 6204 | CE2 | PHE | B | 381 | 45.358 | 67.400 | -6.438  | 1.00 | 33.68 | C |
| ATOM | 6205 | CZ  | PHE | B | 381 | 44.466 | 66.706 | -5.622  | 1.00 | 33.76 | C |
| ATOM | 6206 | N   | ALA | B | 382 | 48.805 | 62.738 | -10.047 | 1.00 | 31.08 | N |
| ATOM | 6207 | CA  | ALA | B | 382 | 49.397 | 62.143 | -11.250 | 1.00 | 31.34 | C |
| ATOM | 6208 | C   | ALA | B | 382 | 49.505 | 60.624 | -11.153 | 1.00 | 31.81 | C |
| ATOM | 6209 | O   | ALA | B | 382 | 49.356 | 59.923 | -12.156 | 1.00 | 31.88 | O |
| ATOM | 6210 | CB  | ALA | B | 382 | 50.776 | 62.740 | -11.489 | 1.00 | 31.94 | C |
| ATOM | 6211 | N   | ALA | B | 383 | 49.762 | 60.113 | -9.946  | 1.00 | 30.89 | N |
| ATOM | 6212 | CA  | ALA | B | 383 | 49.887 | 58.681 | -9.734  | 1.00 | 30.60 | C |
| ATOM | 6213 | C   | ALA | B | 383 | 48.560 | 57.928 | -9.887  | 1.00 | 30.96 | C |
| ATOM | 6214 | O   | ALA | B | 383 | 48.552 | 56.684 | -10.016 | 1.00 | 29.91 | O |
| ATOM | 6215 | CB  | ALA | B | 383 | 50.489 | 58.407 | -8.335  | 1.00 | 30.62 | C |
| ATOM | 6216 | N   | GLU | B | 384 | 47.444 | 58.664 | -9.847  | 1.00 | 31.57 | N |
| ATOM | 6217 | CA  | GLU | B | 384 | 46.141 | 58.029 | -9.980  | 1.00 | 33.26 | C |
| ATOM | 6218 | C   | GLU | B | 384 | 46.077 | 57.287 | -11.314 | 1.00 | 34.36 | C |
| ATOM | 6219 | O   | GLU | B | 384 | 45.456 | 56.238 | -11.414 | 1.00 | 34.26 | O |
| ATOM | 6220 | CB  | GLU | B | 384 | 45.009 | 59.056 | -9.852  | 1.00 | 33.82 | C |
| ATOM | 6221 | CG  | GLU | B | 384 | 44.804 | 59.528 | -8.393  | 1.00 | 34.84 | C |
| ATOM | 6222 | CD  | GLU | B | 384 | 43.814 | 60.690 | -8.249  | 1.00 | 36.29 | C |
| ATOM | 6223 | OE1 | GLU | B | 384 | 43.025 | 60.954 | -9.174  | 1.00 | 37.00 | O |
| ATOM | 6224 | OE2 | GLU | B | 384 | 43.815 | 61.351 | -7.196  | 1.00 | 37.18 | O |
| ATOM | 6225 | N   | GLU | B | 385 | 46.768 | 57.804 | -12.325 | 1.00 | 35.65 | N |
| ATOM | 6226 | CA  | GLU | B | 385 | 46.777 | 57.146 | -13.628 | 1.00 | 37.35 | C |
| ATOM | 6227 | C   | GLU | B | 385 | 47.373 | 55.754 | -13.527 | 1.00 | 36.61 | C |
| ATOM | 6228 | O   | GLU | B | 385 | 47.077 | 54.908 | -14.359 | 1.00 | 36.58 | O |
| ATOM | 6229 | CB  | GLU | B | 385 | 47.648 | 57.900 | -14.628 | 1.00 | 39.93 | C |
| ATOM | 6230 | CG  | GLU | B | 385 | 47.488 | 59.378 | -14.630 | 1.00 | 44.37 | C |
| ATOM | 6231 | CD  | GLU | B | 385 | 48.563 | 60.018 | -15.497 | 1.00 | 47.08 | C |
| ATOM | 6232 | OE1 | GLU | B | 385 | 48.645 | 59.645 | -16.704 | 1.00 | 48.01 | O |
| ATOM | 6233 | OE2 | GLU | B | 385 | 49.332 | 60.872 | -14.964 | 1.00 | 48.30 | O |
| ATOM | 6234 | N   | ARG | B | 386 | 48.262 | 55.539 | -12.560 | 1.00 | 35.60 | N |
| ATOM | 6235 | CA  | ARG | B | 386 | 48.903 | 54.244 | -12.389 | 1.00 | 34.81 | C |
| ATOM | 6236 | C   | ARG | B | 386 | 48.135 | 53.357 | -11.435 | 1.00 | 33.76 | C |
| ATOM | 6237 | O   | ARG | B | 386 | 48.570 | 52.253 | -11.158 | 1.00 | 33.88 | O |
| ATOM | 6238 | CB  | ARG | B | 386 | 50.345 | 54.421 | -11.890 | 1.00 | 35.97 | C |
| ATOM | 6239 | CG  | ARG | B | 386 | 51.262 | 55.085 | -12.899 | 1.00 | 37.89 | C |
| ATOM | 6240 | CD  | ARG | B | 386 | 52.724 | 55.232 | -12.432 | 1.00 | 39.91 | C |
| ATOM | 6241 | NE  | ARG | B | 386 | 52.844 | 56.144 | -11.289 | 1.00 | 42.77 | N |
| ATOM | 6242 | CZ  | ARG | B | 386 | 53.928 | 56.236 | -10.507 | 1.00 | 43.68 | C |
| ATOM | 6243 | NH1 | ARG | B | 386 | 54.992 | 55.465 | -10.764 | 1.00 | 43.91 | N |
| ATOM | 6244 | NH2 | ARG | B | 386 | 53.938 | 57.060 | -9.453  | 1.00 | 42.40 | N |
| ATOM | 6245 | N   | GLY | B | 387 | 46.996 | 53.847 | -10.937 | 1.00 | 32.66 | N |
| ATOM | 6246 | CA  | GLY | B | 387 | 46.156 | 53.083 | -10.017 | 1.00 | 31.49 | C |
| ATOM | 6247 | C   | GLY | B | 387 | 46.200 | 53.472 | -8.536  | 1.00 | 30.74 | C |
| ATOM | 6248 | O   | GLY | B | 387 | 45.558 | 52.819 | -7.703  | 1.00 | 30.99 | O |

| ATOM | 6249 | N   | TYR B 388 | 46.940 | 54.534 | -8.209 | 1.00 | 29.71 | N |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 6250 | CA  | TYR B 388 | 47.069 | 55.015 | -6.834 | 1.00 | 28.64 | C |
| ATOM | 6251 | C   | TYR B 388 | 45.704 | 55.496 | -6.382 | 1.00 | 28.32 | C |
| ATOM | 6252 | O   | TYR B 388 | 45.040 | 56.230 | -7.107 | 1.00 | 28.40 | O |
| ATOM | 6253 | CB  | TYR B 388 | 48.047 | 56.169 | -6.800 | 1.00 | 27.38 | C |
| ATOM | 6254 | CG  | TYR B 388 | 48.329 | 56.733 | -5.428 | 1.00 | 27.29 | C |
| ATOM | 6255 | CD1 | TYR B 388 | 49.002 | 55.971 | -4.463 | 1.00 | 26.74 | C |
| ATOM | 6256 | CD2 | TYR B 388 | 47.975 | 58.058 | -5.112 | 1.00 | 26.77 | C |
| ATOM | 6257 | CE1 | TYR B 388 | 49.326 | 56.520 | -3.220 | 1.00 | 26.31 | C |
| ATOM | 6258 | CE2 | TYR B 388 | 48.291 | 58.606 | -3.884 | 1.00 | 27.06 | C |
| ATOM | 6259 | CZ  | TYR B 388 | 48.975 | 57.827 | -2.944 | 1.00 | 26.85 | C |
| ATOM | 6260 | OH  | TYR B 388 | 49.344 | 58.392 | -1.744 | 1.00 | 26.85 | O |
| ATOM | 6261 | N   | THR B 389 | 45.288 | 55.121 | -5.183 | 1.00 | 28.02 | N |
| ATOM | 6262 | CA  | THR B 389 | 43.953 | 55.523 | -4.697 | 1.00 | 27.71 | C |
| ATOM | 6263 | C   | THR B 389 | 43.947 | 56.343 | -3.391 | 1.00 | 27.74 | C |
| ATOM | 6264 | O   | THR B 389 | 42.911 | 56.890 | -3.023 | 1.00 | 27.55 | O |
| ATOM | 6265 | CB  | THR B 389 | 43.083 | 54.288 | -4.450 | 1.00 | 28.39 | C |
| ATOM | 6266 | OG1 | THR B 389 | 43.768 | 53.402 | -3.534 | 1.00 | 27.88 | O |
| ATOM | 6267 | CG2 | THR B 389 | 42.795 | 53.536 | -5.802 | 1.00 | 28.80 | C |
| ATOM | 6268 | N   | ALA B 390 | 45.105 | 56.486 | -2.732 | 1.00 | 27.81 | N |
| ATOM | 6269 | CA  | ALA B 390 | 45.171 | 57.178 | -1.430 | 1.00 | 27.51 | C |
| ATOM | 6270 | C   | ALA B 390 | 44.823 | 58.683 | -1.397 | 1.00 | 28.58 | C |
| ATOM | 6271 | O   | ALA B 390 | 44.651 | 59.282 | -0.284 | 1.00 | 26.92 | O |
| ATOM | 6272 | CB  | ALA B 390 | 46.552 | 56.905 | -0.754 | 1.00 | 27.19 | C |
| ATOM | 6273 | N   | THR B 391 | 44.712 | 59.303 | -2.584 | 1.00 | 28.48 | N |
| ATOM | 6274 | CA  | THR B 391 | 44.299 | 60.697 | -2.636 | 1.00 | 29.62 | C |
| ATOM | 6275 | C   | THR B 391 | 42.857 | 60.718 | -2.099 | 1.00 | 30.23 | C |
| ATOM | 6276 | O   | THR B 391 | 42.402 | 61.721 | -1.564 | 1.00 | 31.80 | O |
| ATOM | 6277 | CB  | THR B 391 | 44.355 | 61.268 | -4.080 | 1.00 | 30.30 | C |
| ATOM | 6278 | OG1 | THR B 391 | 43.710 | 60.361 | -4.992 | 1.00 | 33.26 | O |
| ATOM | 6279 | CG2 | THR B 391 | 45.763 | 61.415 | -4.516 | 1.00 | 30.89 | C |
| ATOM | 6280 | N   | LYS B 392 | 42.121 | 59.629 | -2.240 | 1.00 | 29.77 | N |
| ATOM | 6281 | CA  | LYS B 392 | 40.779 | 59.570 | -1.654 | 1.00 | 30.39 | C |
| ATOM | 6282 | C   | LYS B 392 | 41.046 | 58.915 | -0.281 | 1.00 | 29.32 | C |
| ATOM | 6283 | O   | LYS B 392 | 40.837 | 57.723 | -0.070 | 1.00 | 28.06 | O |
| ATOM | 6284 | CB  | LYS B 392 | 39.875 | 58.727 | -2.546 | 1.00 | 32.00 | C |
| ATOM | 6285 | CG  | LYS B 392 | 39.639 | 59.449 | -3.908 | 1.00 | 35.11 | C |
| ATOM | 6286 | CD  | LYS B 392 | 38.684 | 58.676 | -4.754 | 1.00 | 38.94 | C |
| ATOM | 6287 | CE  | LYS B 392 | 38.416 | 59.370 | -6.095 | 1.00 | 41.20 | C |
| ATOM | 6288 | NZ  | LYS B 392 | 37.320 | 58.637 | -6.834 | 1.00 | 43.43 | N |
| ATOM | 6289 | N   | HIS B 393 | 41.544 | 59.736 | 0.633  | 1.00 | 28.22 | N |
| ATOM | 6290 | CA  | HIS B 393 | 41.980 | 59.268 | 1.938  | 1.00 | 27.90 | C |
| ATOM | 6291 | C   | HIS B 393 | 40.919 | 58.585 | 2.815  | 1.00 | 26.66 | C |
| ATOM | 6292 | O   | HIS B 393 | 41.245 | 57.593 | 3.462  | 1.00 | 25.65 | O |
| ATOM | 6293 | CB  | HIS B 393 | 42.626 | 60.431 | 2.687  | 1.00 | 29.58 | C |
| ATOM | 6294 | CG  | HIS B 393 | 41.676 | 61.561 | 2.958  | 1.00 | 31.60 | C |
| ATOM | 6295 | ND1 | HIS B 393 | 40.835 | 62.081 | 1.986  | 1.00 | 32.87 | N |
| ATOM | 6296 | CD2 | HIS B 393 | 41.398 | 62.241 | 4.097  | 1.00 | 31.92 | C |
| ATOM | 6297 | CE1 | HIS B 393 | 40.084 | 63.032 | 2.519  | 1.00 | 33.15 | C |
| ATOM | 6298 | NE2 | HIS B 393 | 40.407 | 63.150 | 3.801  | 1.00 | 33.04 | N |
| ATOM | 6299 | N   | GLN B 394 | 39.683 | 59.110 | 2.838  | 1.00 | 25.68 | N |
| ATOM | 6300 | CA  | GLN B 394 | 38.602 | 58.528 | 3.666  | 1.00 | 26.40 | C |
| ATOM | 6301 | C   | GLN B 394 | 38.309 | 57.115 | 3.171  | 1.00 | 26.52 | C |
| ATOM | 6302 | O   | GLN B 394 | 38.252 | 56.138 | 3.947  | 1.00 | 25.90 | O |
| ATOM | 6303 | CB  | GLN B 394 | 37.304 | 59.369 | 3.586  | 1.00 | 26.97 | C |
| ATOM | 6304 | CG  | GLN B 394 | 37.456 | 60.862 | 3.966  | 1.00 | 28.03 | C |
| ATOM | 6305 | CD  | GLN B 394 | 37.905 | 61.156 | 5.412  | 1.00 | 31.05 | C |
| ATOM | 6306 | OE1 | GLN B 394 | 38.617 | 60.387 | 6.055  | 1.00 | 29.83 | O |
| ATOM | 6307 | NE2 | GLN B 394 | 37.497 | 62.340 | 5.912  | 1.00 | 32.90 | N |
| ATOM | 6308 | N   | ARG B 395 | 38.142 | 57.022 | 1.854  | 1.00 | 26.15 | N |
| ATOM | 6309 | CA  | ARG B 395 | 37.878 | 55.755 | 1.211  | 1.00 | 26.14 | C |
| ATOM | 6310 | C   | ARG B 395 | 38.997 | 54.759 | 1.534  | 1.00 | 24.97 | C |
| ATOM | 6311 | O   | ARG B 395 | 38.734 | 53.603 | 1.896  | 1.00 | 24.26 | O |
| ATOM | 6312 | CB  | ARG B 395 | 37.819 | 55.968 | -0.314 | 1.00 | 28.08 | C |
| ATOM | 6313 | CG  | ARG B 395 | 37.708 | 54.674 | -1.118 | 1.00 | 32.00 | C |
| ATOM | 6314 | CD  | ARG B 395 | 37.904 | 54.954 | -2.617 | 1.00 | 34.44 | C |
| ATOM | 6315 | NE  | ARG B 395 | 37.703 | 53.731 | -3.380 | 1.00 | 38.07 | N |
| ATOM | 6316 | CZ  | ARG B 395 | 38.570 | 52.713 | -3.411 | 1.00 | 40.14 | C |
| ATOM | 6317 | NH1 | ARG B 395 | 39.720 | 52.776 | -2.714 | 1.00 | 40.20 | N |
| ATOM | 6318 | NH2 | ARG B 395 | 38.280 | 51.621 | -4.121 | 1.00 | 40.33 | N |
| ATOM | 6319 | N   | GLU B 396 | 40.233 | 55.233 | 1.407  | 1.00 | 23.87 | N |
| ATOM | 6320 | CA  | GLU B 396 | 41.445 | 54.408 | 1.590  | 1.00 | 23.65 | C |
| ATOM | 6321 | C   | GLU B 396 | 41.535 | 53.723 | 2.957  | 1.00 | 22.49 | C |
| ATOM | 6322 | O   | GLU B 396 | 42.052 | 52.607 | 3.061  | 1.00 | 21.53 | O |
| ATOM | 6323 | CB  | GLU B 396 | 42.705 | 55.260 | 1.403  | 1.00 | 23.97 | C |
| ATOM | 6324 | CG  | GLU B 396 | 44.057 | 54.465 | 1.345  | 1.00 | 23.23 | C |
| ATOM | 6325 | CD  | GLU B 396 | 44.281 | 53.762 | -0.007 | 1.00 | 23.75 | C |
| ATOM | 6326 | OE1 | GLU B 396 | 43.569 | 54.085 | -0.977 | 1.00 | 23.68 | O |
| ATOM | 6327 | OE2 | GLU B 396 | 45.176 | 52.886 | -0.092 | 1.00 | 24.68 | O |
| ATOM | 6328 | N   | VAL B 397 | 41.054 | 54.392 | 4.000  | 1.00 | 21.49 | N |

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ATOM   6329  CA  VAL B 397      41.128  53.781   5.326  1.00 21.66           C
ATOM   6330  C   VAL B 397      39.819  53.120   5.741  1.00 22.03           C
ATOM   6331  O   VAL B 397      39.650  52.738   6.896  1.00 22.16           O
ATOM   6332  CB  VAL B 397      41.585  54.798   6.419  1.00 21.66           C
ATOM   6333  CG1 VAL B 397      43.070  55.206   6.174  1.00 20.42           C
ATOM   6334  CG2 VAL B 397      40.672  56.019   6.400  1.00 21.41           C
ATOM   6335  N   GLY B 398      38.896  52.975   4.800  1.00 22.00           N
ATOM   6336  CA  GLY B 398      37.658  52.288   5.112  1.00 22.52           C
ATOM   6337  C   GLY B 398      36.408  53.065   5.496  1.00 23.23           C
ATOM   6338  O   GLY B 398      35.453  52.456   5.978  1.00 21.95           O
ATOM   6339  N   ALA B 399      36.370  54.380   5.278  1.00 23.52           N
ATOM   6340  CA  ALA B 399      35.164  55.125   5.664  1.00 23.87           C
ATOM   6341  C   ALA B 399      33.929  54.582   4.928  1.00 24.57           C
ATOM   6342  O   ALA B 399      32.844  54.510   5.511  1.00 25.38           O
ATOM   6343  CB  ALA B 399      35.340  56.654   5.386  1.00 23.15           C
ATOM   6344  N   GLY B 400      34.077  54.183   3.663  1.00 25.23           N
ATOM   6345  CA  GLY B 400      32.915  53.667   2.946  1.00 25.42           C
ATOM   6346  C   GLY B 400      32.504  52.295   3.466  1.00 25.29           C
ATOM   6347  O   GLY B 400      31.323  51.958   3.465  1.00 23.66           O
ATOM   6348  N   TYR B 401      33.497  51.495   3.870  1.00 24.00           N
ATOM   6349  CA  TYR B 401      33.220  50.174   4.407  1.00 24.29           C
ATOM   6350  C   TYR B 401      32.462  50.320   5.753  1.00 24.34           C
ATOM   6351  O   TYR B 401      31.476  49.615   5.990  1.00 24.51           O
ATOM   6352  CB  TYR B 401      34.531  49.396   4.613  1.00 23.32           C
ATOM   6353  CG  TYR B 401      34.348  48.001   5.162  1.00 24.00           C
ATOM   6354  CD1 TYR B 401      33.913  46.947   4.346  1.00 24.20           C
ATOM   6355  CD2 TYR B 401      34.597  47.721   6.515  1.00 24.00           C
ATOM   6356  CE1 TYR B 401      33.726  45.639   4.870  1.00 23.48           C
ATOM   6357  CE2 TYR B 401      34.422  46.429   7.028  1.00 23.82           C
ATOM   6358  CZ  TYR B 401      33.985  45.403   6.196  1.00 23.50           C
ATOM   6359  OH  TYR B 401      33.806  44.151   6.735  1.00 24.26           O
ATOM   6360  N   PHE B 402      32.912  51.226   6.632  1.00 24.29           N
ATOM   6361  CA  PHE B 402      32.219  51.407   7.908  1.00 24.35           C
ATOM   6362  C   PHE B 402      30.867  52.080   7.710  1.00 25.52           C
ATOM   6363  O   PHE B 402      29.910  51.814   8.463  1.00 25.67           O
ATOM   6364  CB  PHE B 402      33.124  52.149   8.909  1.00 23.93           C
ATOM   6365  CG  PHE B 402      34.114  51.222   9.578  1.00 23.27           C
ATOM   6366  CD1 PHE B 402      33.741  50.482  10.695  1.00 22.70           C
ATOM   6367  CD2 PHE B 402      35.350  50.976   9.011  1.00 22.84           C
ATOM   6368  CE1 PHE B 402      34.573  49.499  11.227  1.00 22.99           C
ATOM   6369  CE2 PHE B 402      36.219  49.974   9.548  1.00 23.41           C
ATOM   6370  CZ  PHE B 402      35.823  49.236  10.655  1.00 22.18           C
ATOM   6371  N   ASP B 403      30.758  52.936   6.688  1.00 26.60           N
ATOM   6372  CA  ASP B 403      29.457  53.540   6.401  1.00 27.66           C
ATOM   6373  C   ASP B 403      28.516  52.385   5.982  1.00 26.60           C
ATOM   6374  O   ASP B 403      27.320  52.377   6.313  1.00 25.86           O
ATOM   6375  CB  ASP B 403      29.557  54.567   5.254  1.00 29.81           C
ATOM   6376  CG  ASP B 403      30.115  55.913   5.709  1.00 32.93           C
ATOM   6377  OD1 ASP B 403      30.289  56.158   6.934  1.00 34.13           O
ATOM   6378  OD2 ASP B 403      30.385  56.752   4.829  1.00 35.19           O
ATOM   6379  N   ARG B 404      29.050  51.402   5.266  1.00 26.23           N
ATOM   6380  CA  ARG B 404      28.197  50.300   4.860  1.00 26.77           C
ATOM   6381  C   ARG B 404      27.757  49.480   6.076  1.00 26.30           C
ATOM   6382  O   ARG B 404      26.604  49.035   6.173  1.00 25.75           O
ATOM   6383  CB  ARG B 404      28.902  49.423   3.832  1.00 28.46           C
ATOM   6384  CG  ARG B 404      28.029  48.260   3.414  1.00 31.28           C
ATOM   6385  CD  ARG B 404      28.595  47.462   2.229  1.00 33.95           C
ATOM   6386  NE  ARG B 404      27.559  46.529   1.836  1.00 36.76           N
ATOM   6387  CZ  ARG B 404      26.878  46.590   0.701  1.00 37.55           C
ATOM   6388  NH1 ARG B 404      27.132  47.539  -0.195  1.00 37.50           N
ATOM   6389  NH2 ARG B 404      25.903  45.717   0.497  1.00 38.43           N
ATOM   6390  N   ILE B 405      28.660  49.277   7.034  1.00 25.60           N
ATOM   6391  CA  ILE B 405      28.256  48.558   8.239  1.00 24.98           C
ATOM   6392  C   ILE B 405      27.134  49.366   8.941  1.00 25.65           C
ATOM   6393  O   ILE B 405      26.079  48.819   9.328  1.00 25.69           O
ATOM   6394  CB  ILE B 405      29.447  48.392   9.202  1.00 24.70           C
ATOM   6395  CG1 ILE B 405      30.455  47.393   8.582  1.00 24.90           C
ATOM   6396  CG2 ILE B 405      28.946  47.947  10.580  1.00 23.92           C
ATOM   6397  CD1 ILE B 405      31.763  47.237   9.366  1.00 23.48           C
ATOM   6398  N   ALA B 406      27.340  50.673   9.088  1.00 25.50           N
ATOM   6399  CA  ALA B 406      26.333  51.481   9.763  1.00 26.08           C
ATOM   6400  C   ALA B 406      24.974  51.360   9.063  1.00 27.08           C
ATOM   6401  O   ALA B 406      23.938  51.261   9.722  1.00 26.78           O
ATOM   6402  CB  ALA B 406      26.765  52.928   9.800  1.00 25.49           C
ATOM   6403  N   THR B 407      24.998  51.370   7.730  1.00 27.26           N
ATOM   6404  CA  THR B 407      23.789  51.269   6.914  1.00 28.84           C
ATOM   6405  C   THR B 407      23.155  49.894   7.069  1.00 28.83           C
ATOM   6406  O   THR B 407      21.930  49.767   7.141  1.00 29.11           O
ATOM   6407  CB  THR B 407      24.132  51.510   5.428  1.00 29.05           C
ATOM   6408  OG1 THR B 407      24.657  52.840   5.294  1.00 30.94           O
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| ATOM | 6409 | CG2 | THR | B | 407 | 22.890 | 51.368 | 4.540 | 1.00 | 30.68 | C |
|------|------|-----|-----|---|-----|--------|--------|-------|------|-------|---|
| ATOM | 6410 | N | THR | B | 408 | 23.993 | 48.864 | 7.105 | 1.00 | 28.55 | N |
| ATOM | 6411 | CA | THR | B | 408 | 23.512 | 47.495 | 7.275 | 1.00 | 28.94 | C |
| ATOM | 6412 | C | THR | B | 408 | 22.775 | 47.371 | 8.597 | 1.00 | 30.20 | C |
| ATOM | 6413 | O | THR | B | 408 | 21.696 | 46.787 | 8.665 | 1.00 | 29.92 | O |
| ATOM | 6414 | CB | THR | B | 408 | 24.680 | 46.509 | 7.249 | 1.00 | 28.11 | C |
| ATOM | 6415 | OG1 | THR | B | 408 | 25.319 | 46.619 | 5.978 | 1.00 | 27.32 | O |
| ATOM | 6416 | CG2 | THR | B | 408 | 24.212 | 45.073 | 7.497 | 1.00 | 26.28 | C |
| ATOM | 6417 | N | VAL | B | 409 | 23.360 | 47.934 | 9.653 | 1.00 | 31.25 | N |
| ATOM | 6418 | CA | VAL | B | 409 | 22.743 | 47.890 | 10.975 | 1.00 | 32.48 | C |
| ATOM | 6419 | C | VAL | B | 409 | 21.480 | 48.771 | 11.070 | 1.00 | 34.50 | C |
| ATOM | 6420 | O | VAL | B | 409 | 20.586 | 48.458 | 11.841 | 1.00 | 35.11 | O |
| ATOM | 6421 | CB | VAL | B | 409 | 23.770 | 48.302 | 12.071 | 1.00 | 32.36 | C |
| ATOM | 6422 | CG1 | VAL | B | 409 | 23.080 | 48.521 | 13.391 | 1.00 | 31.98 | C |
| ATOM | 6423 | CG2 | VAL | B | 409 | 24.806 | 47.202 | 12.217 | 1.00 | 30.69 | C |
| ATOM | 6424 | N | ASP | B | 410 | 21.401 | 49.846 | 10.287 | 1.00 | 36.22 | N |
| ATOM | 6425 | CA | ASP | B | 410 | 20.249 | 50.761 | 10.292 | 1.00 | 39.18 | C |
| ATOM | 6426 | C | ASP | B | 410 | 19.077 | 50.176 | 9.502 | 1.00 | 41.04 | C |
| ATOM | 6427 | O | ASP | B | 410 | 19.135 | 50.089 | 8.285 | 1.00 | 41.42 | O |
| ATOM | 6428 | CB | ASP | B | 410 | 20.670 | 52.101 | 9.678 | 1.00 | 39.91 | C |
| ATOM | 6429 | CG | ASP | B | 410 | 19.520 | 53.122 | 9.582 | 1.00 | 41.81 | C |
| ATOM | 6430 | OD1 | ASP | B | 410 | 18.426 | 52.904 | 10.156 | 1.00 | 41.90 | O |
| ATOM | 6431 | OD2 | ASP | B | 410 | 19.723 | 54.171 | 8.926 | 1.00 | 42.43 | O |
| ATOM | 6432 | N | PRO | B | 411 | 17.991 | 49.774 | 10.186 | 1.00 | 43.19 | N |
| ATOM | 6433 | CA | PRO | B | 411 | 16.852 | 49.206 | 9.449 | 1.00 | 44.95 | C |
| ATOM | 6434 | C | PRO | B | 411 | 16.100 | 50.207 | 8.536 | 1.00 | 46.69 | C |
| ATOM | 6435 | O | PRO | B | 411 | 15.439 | 49.805 | 7.578 | 1.00 | 47.22 | O |
| ATOM | 6436 | CB | PRO | B | 411 | 15.980 | 48.607 | 10.565 | 1.00 | 44.46 | C |
| ATOM | 6437 | CG | PRO | B | 411 | 16.256 | 49.492 | 11.742 | 1.00 | 43.92 | C |
| ATOM | 6438 | CD | PRO | B | 411 | 17.747 | 49.774 | 11.646 | 1.00 | 43.18 | C |
| ATOM | 6439 | N | ASN | B | 412 | 16.224 | 51.501 | 8.819 | 1.00 | 48.38 | N |
| ATOM | 6440 | CA | ASN | B | 412 | 15.575 | 52.540 | 8.020 | 1.00 | 50.51 | C |
| ATOM | 6441 | C | ASN | B | 412 | 16.417 | 52.925 | 6.801 | 1.00 | 51.83 | C |
| ATOM | 6442 | O | ASN | B | 412 | 16.090 | 53.888 | 6.101 | 1.00 | 51.71 | O |
| ATOM | 6443 | CB | ASN | B | 412 | 15.366 | 53.811 | 8.851 | 1.00 | 50.63 | C |
| ATOM | 6444 | CG | ASN | B | 412 | 14.479 | 53.589 | 10.056 | 1.00 | 51.58 | C |
| ATOM | 6445 | OD1 | ASN | B | 412 | 14.385 | 54.458 | 10.939 | 1.00 | 51.37 | O |
| ATOM | 6446 | ND2 | ASN | B | 412 | 13.813 | 52.429 | 10.104 | 1.00 | 51.17 | N |
| ATOM | 6447 | N | SER | B | 413 | 17.521 | 52.212 | 6.579 | 1.00 | 53.10 | N |
| ATOM | 6448 | CA | SER | B | 413 | 18.389 | 52.506 | 5.441 | 1.00 | 54.40 | C |
| ATOM | 6449 | C | SER | B | 413 | 18.735 | 51.214 | 4.734 | 1.00 | 55.62 | C |
| ATOM | 6450 | O | SER | B | 413 | 18.956 | 50.181 | 5.364 | 1.00 | 56.13 | O |
| ATOM | 6451 | CB | SER | B | 413 | 19.684 | 53.194 | 5.887 | 1.00 | 53.61 | C |
| ATOM | 6452 | OG | SER | B | 413 | 19.425 | 54.428 | 6.512 | 1.00 | 52.55 | O |
| ATOM | 6453 | N | SER | B | 414 | 18.788 | 51.270 | 3.417 | 1.00 | 56.86 | N |
| ATOM | 6454 | CA | SER | B | 414 | 19.109 | 50.084 | 2.657 | 1.00 | 58.17 | C |
| ATOM | 6455 | C | SER | B | 414 | 20.481 | 50.190 | 2.039 | 1.00 | 58.69 | C |
| ATOM | 6456 | O | SER | B | 414 | 20.958 | 51.268 | 1.703 | 1.00 | 58.20 | O |
| ATOM | 6457 | CB | SER | B | 414 | 18.052 | 49.852 | 1.584 | 1.00 | 58.64 | C |
| ATOM | 6458 | OG | SER | B | 414 | 17.836 | 51.037 | 0.847 | 1.00 | 58.63 | O |
| ATOM | 6459 | N | THR | B | 415 | 21.127 | 49.048 | 1.911 | 1.00 | 59.87 | N |
| ATOM | 6460 | CA | THR | B | 415 | 22.454 | 49.010 | 1.331 | 1.00 | 61.31 | C |
| ATOM | 6461 | C | THR | B | 415 | 22.310 | 48.771 | -0.168 | 1.00 | 61.91 | C |
| ATOM | 6462 | O | THR | B | 415 | 21.291 | 48.254 | -0.623 | 1.00 | 61.79 | O |
| ATOM | 6463 | CB | THR | B | 415 | 23.272 | 47.876 | 1.957 | 1.00 | 61.27 | C |
| ATOM | 6464 | OG1 | THR | B | 415 | 22.667 | 46.620 | 1.624 | 1.00 | 61.55 | O |
| ATOM | 6465 | CG2 | THR | B | 415 | 23.294 | 48.025 | 3.483 | 1.00 | 61.16 | C |
| ATOM | 6466 | N | THR | B | 416 | 23.317 | 49.168 | -0.929 | 1.00 | 62.74 | N |
| ATOM | 6467 | CA | THR | B | 416 | 23.291 | 48.960 | -2.368 | 1.00 | 63.58 | C |
| ATOM | 6468 | C | THR | B | 416 | 23.875 | 47.582 | -2.647 | 1.00 | 63.68 | C |
| ATOM | 6469 | O | THR | B | 416 | 24.946 | 47.241 | -2.145 | 1.00 | 63.55 | O |
| ATOM | 6470 | CB | THR | B | 416 | 24.128 | 50.015 | -3.094 | 1.00 | 63.95 | C |
| ATOM | 6471 | OG1 | THR | B | 416 | 25.501 | 49.872 | -2.718 | 1.00 | 64.52 | O |
| ATOM | 6472 | CG2 | THR | B | 416 | 23.649 | 51.419 | -2.720 | 1.00 | 64.32 | C |
| ATOM | 6473 | N | ALA | B | 417 | 23.169 | 46.788 | -3.445 | 1.00 | 63.79 | N |
| ATOM | 6474 | CA | ALA | B | 417 | 23.619 | 45.439 | -3.773 | 1.00 | 63.77 | C |
| ATOM | 6475 | C | ALA | B | 417 | 24.908 | 45.470 | -4.593 | 1.00 | 63.41 | C |
| ATOM | 6476 | O | ALA | B | 417 | 25.144 | 46.412 | -5.349 | 1.00 | 63.37 | O |
| ATOM | 6477 | CB | ALA | B | 417 | 22.524 | 44.692 | -4.538 | 1.00 | 63.89 | C |
| ATOM | 6478 | N | LEU | B | 418 | 25.737 | 44.438 | -4.430 | 1.00 | 62.44 | N |
| ATOM | 6479 | CA | LEU | B | 418 | 27.008 | 44.324 | -5.156 | 1.00 | 61.60 | C |
| ATOM | 6480 | C | LEU | B | 418 | 26.808 | 43.541 | -6.462 | 1.00 | 61.51 | C |
| ATOM | 6481 | O | LEU | B | 418 | 27.547 | 43.797 | -7.445 | 1.00 | 61.42 | O |
| ATOM | 6482 | CB | LEU | B | 418 | 28.064 | 43.621 | -4.286 | 1.00 | 60.55 | C |
| ATOM | 6483 | CG | LEU | B | 418 | 28.336 | 44.227 | -2.904 | 1.00 | 59.66 | C |
| ATOM | 6484 | CD1 | LEU | B | 418 | 29.509 | 43.516 | -2.257 | 1.00 | 59.08 | C |
| ATOM | 6485 | CD2 | LEU | B | 418 | 28.622 | 45.705 | -3.038 | 1.00 | 58.80 | C |
| TER | 6486 | | LEU | B | 418 | | | | | | |
| HETATM | 6487 | MG | MG | A | 451 | 39.267 | 63.072 | 14.495 | 1.00 | 31.02 | MG |
| HETATM | 6488 | MG | MG | B | 452 | 68.622 | 41.142 | 11.831 | 1.00 | 31.55 | MG |

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HETATM 6489  O   HOH  501    37.778  53.010  21.711  1.00 18.17          O
HETATM 6490  O   HOH  502    61.895  38.894  14.755  1.00 20.72          O
HETATM 6491  O   HOH  503    59.819  67.335  25.470  1.00 22.29          O
HETATM 6492  O   HOH  504    50.650  34.987  19.347  1.00 22.54          O
HETATM 6493  O   HOH  505    43.199  60.169  20.573  1.00 19.70          O
HETATM 6494  O   HOH  506    59.923  39.520  16.558  1.00 22.16          O
HETATM 6495  O   HOH  507    46.380  63.892  35.982  1.00 20.43          O
HETATM 6496  O   HOH  508    39.598  42.153  15.446  1.00 20.60          O
HETATM 6497  O   HOH  509    45.046  42.981  15.402  1.00 21.01          O
HETATM 6498  O   HOH  510    62.263  51.202   9.655  1.00 20.80          O
HETATM 6499  O   HOH  511    50.452  61.225  35.999  1.00 21.04          O
HETATM 6500  O   HOH  512    56.575  63.425  30.406  1.00 20.77          O
HETATM 6501  O   HOH  513    61.007  34.516  23.537  1.00 21.37          O
HETATM 6502  O   HOH  514    49.138  53.442  18.837  1.00 20.34          O
HETATM 6503  O   HOH  515    43.730  58.942  37.410  1.00 17.06          O
HETATM 6504  O   HOH  516    46.803  32.666  10.337  1.00 19.51          O
HETATM 6505  O   HOH  517    49.902  56.051  30.647  1.00 20.32          O
HETATM 6506  O   HOH  518    49.705  60.658  13.517  1.00 20.86          O
HETATM 6507  O   HOH  519    60.360  34.030  20.830  1.00 23.43          O
HETATM 6508  O   HOH  520    59.948  49.831  26.556  1.00 21.57          O
HETATM 6509  O   HOH  521    48.508  62.645  37.289  1.00 22.13          O
HETATM 6510  O   HOH  522    64.213  40.703  23.309  1.00 21.91          O
HETATM 6511  O   HOH  523    53.963  31.790  20.496  1.00 20.27          O
HETATM 6512  O   HOH  524    56.323  67.252  23.707  1.00 21.90          O
HETATM 6513  O   HOH  525    44.304  57.860  21.774  1.00 19.80          O
HETATM 6514  O   HOH  526    44.846  56.606  35.982  1.00 20.23          O
HETATM 6515  O   HOH  527    38.934  56.184  14.540  1.00 20.49          O
HETATM 6516  O   HOH  528    59.588  45.744   8.400  1.00 23.27          O
HETATM 6517  O   HOH  529    38.867  55.713  28.069  1.00 23.04          O
HETATM 6518  O   HOH  530    44.057  55.057  28.390  1.00 22.05          O
HETATM 6519  O   HOH  531    36.413  60.872  21.012  1.00 19.60          O
HETATM 6520  O   HOH  532    52.683  29.210  23.424  1.00 19.75          O
HETATM 6521  O   HOH  533    42.050  81.539  26.124  1.00 17.44          O
HETATM 6522  O   HOH  534    53.162  25.447  17.020  1.00 22.47          O
HETATM 6523  O   HOH  535    61.187  53.796   9.311  1.00 23.07          O
HETATM 6524  O   HOH  536    57.364  54.261  15.121  1.00 19.54          O
HETATM 6525  O   HOH  537    48.666  52.764  27.770  1.00 22.20          O
HETATM 6526  O   HOH  538    49.905  55.809   6.868  1.00 22.13          O
HETATM 6527  O   HOH  539    56.566  54.768   2.486  1.00 23.84          O
HETATM 6528  O   HOH  540    41.279  29.927  14.464  1.00 23.26          O
HETATM 6529  O   HOH  541    34.147  43.476   9.380  1.00 23.34          O
HETATM 6530  O   HOH  542    65.829  22.184   0.995  1.00 20.24          O
HETATM 6531  O   HOH  543    67.556  42.965  15.277  1.00 24.84          O
HETATM 6532  O   HOH  544    58.212  57.858  37.969  1.00 24.05          O
HETATM 6533  O   HOH  545    39.495  49.157  18.010  1.00 22.97          O
HETATM 6534  O   HOH  546    40.609  57.802  27.672  1.00 21.61          O
HETATM 6535  O   HOH  547    62.875  52.248  28.360  1.00 22.67          O
HETATM 6536  O   HOH  548    48.987  37.325   3.783  1.00 22.89          O
HETATM 6537  O   HOH  549    46.971  34.535   1.123  1.00 24.16          O
HETATM 6538  O   HOH  550    50.723  50.105  10.595  1.00 21.08          O
HETATM 6539  O   HOH  551    48.063  57.289   8.637  1.00 22.65          O
HETATM 6540  O   HOH  552    52.131  38.694  21.020  1.00 27.58          O
HETATM 6541  O   HOH  553    40.077  67.078  18.916  1.00 22.15          O
HETATM 6542  O   HOH  554    43.449  40.671  15.769  1.00 22.90          O
HETATM 6543  O   HOH  555    67.244  44.830  17.310  1.00 21.51          O
HETATM 6544  O   HOH  556    58.184  35.374  19.818  1.00 23.46          O
HETATM 6545  O   HOH  557    58.909  53.806  27.848  1.00 24.34          O
HETATM 6546  O   HOH  558    42.389  44.066  17.897  1.00 21.10          O
HETATM 6547  O   HOH  559    58.819  60.341  36.737  1.00 23.44          O
HETATM 6548  O   HOH  560    58.384  53.098  25.249  1.00 22.35          O
HETATM 6549  O   HOH  561    63.514  46.155  23.871  1.00 21.47          O
HETATM 6550  O   HOH  562    50.295  58.923  34.381  1.00 23.20          O
HETATM 6551  O   HOH  563    58.820  66.421  22.905  1.00 22.09          O
HETATM 6552  O   HOH  564    67.836  36.472  17.673  1.00 23.95          O
HETATM 6553  O   HOH  565    49.927  63.739  39.491  1.00 22.20          O
HETATM 6554  O   HOH  566    50.855  36.325  17.123  1.00 19.79          O
HETATM 6555  O   HOH  567    41.161  57.529   9.683  1.00 22.87          O
HETATM 6556  O   HOH  568    59.794  59.286  -2.959  1.00 31.38          O
HETATM 6557  O   HOH  569    50.988  35.667   4.592  1.00 20.97          O
HETATM 6558  O   HOH  570    36.120  52.660   2.159  1.00 20.51          O
HETATM 6559  O   HOH  571    44.505  61.834  46.149  1.00 24.47          O
HETATM 6560  O   HOH  572    46.556  31.077  18.568  1.00 25.85          O
HETATM 6561  O   HOH  573    56.354  35.934  21.890  1.00 24.14          O
HETATM 6562  O   HOH  574    52.388  68.978  28.908  1.00 23.52          O
HETATM 6563  O   HOH  575    40.326  64.974  15.775  1.00 22.44          O
HETATM 6564  O   HOH  576    49.299  30.510  18.454  1.00 24.38          O
HETATM 6565  O   HOH  577    45.688  57.747  32.131  1.00 20.60          O
HETATM 6566  O   HOH  578    50.429  25.663  17.581  1.00 21.45          O
HETATM 6567  O   HOH  579    48.237  72.889  33.671  1.00 23.26          O
HETATM 6568  O   HOH  580    47.126  60.831  38.793  1.00 23.57          O
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| HETATM | 6569 | O | HOH | 581 | 62.261 | 48.704 | 26.464 | 1.00 | 23.56 | O |
|--------|------|---|-----|-----|--------|--------|--------|------|-------|---|
| HETATM | 6570 | O | HOH | 582 | 70.610 | 54.897 | 27.044 | 1.00 | 25.90 | O |
| HETATM | 6571 | O | HOH | 583 | 43.211 | 57.180 | 27.073 | 1.00 | 23.41 | O |
| HETATM | 6572 | O | HOH | 584 | 53.476 | 26.574 | 22.725 | 1.00 | 24.53 | O |
| HETATM | 6573 | O | HOH | 585 | 59.634 | 56.578 | -3.024 | 1.00 | 26.30 | O |
| HETATM | 6574 | O | HOH | 586 | 47.268 | 35.039 | 3.772 | 1.00 | 23.48 | O |
| HETATM | 6575 | O | HOH | 587 | 55.915 | 45.567 | 16.593 | 1.00 | 21.09 | O |
| HETATM | 6576 | O | HOH | 588 | 64.614 | 55.199 | 21.398 | 1.00 | 23.18 | O |
| HETATM | 6577 | O | HOH | 589 | 51.032 | 57.055 | 28.484 | 1.00 | 22.02 | O |
| HETATM | 6578 | O | HOH | 590 | 52.784 | 57.733 | 35.215 | 1.00 | 23.57 | O |
| HETATM | 6579 | O | HOH | 591 | 72.291 | 58.638 | 10.422 | 1.00 | 27.25 | O |
| HETATM | 6580 | O | HOH | 592 | 57.098 | 59.370 | 5.393 | 1.00 | 24.13 | O |
| HETATM | 6581 | O | HOH | 593 | 64.687 | 36.305 | 24.483 | 1.00 | 24.29 | O |
| HETATM | 6582 | O | HOH | 594 | 58.067 | 61.826 | -2.005 | 1.00 | 34.02 | O |
| HETATM | 6583 | O | HOH | 595 | 70.765 | 40.181 | 11.718 | 1.00 | 25.97 | O |
| HETATM | 6584 | O | HOH | 596 | 69.706 | 40.103 | 15.189 | 1.00 | 23.27 | O |
| HETATM | 6585 | O | HOH | 597 | 46.580 | 52.552 | 2.268 | 1.00 | 23.09 | O |
| HETATM | 6586 | O | HOH | 598 | 56.631 | 43.828 | -0.948 | 1.00 | 23.15 | O |
| HETATM | 6587 | O | HOH | 599 | 34.010 | 67.360 | 23.984 | 1.00 | 28.05 | O |
| HETATM | 6588 | O | HOH | 600 | 41.956 | 46.357 | 9.406 | 1.00 | 23.68 | O |
| HETATM | 6589 | O | HOH | 601 | 76.929 | 41.465 | 24.823 | 1.00 | 27.51 | O |
| HETATM | 6590 | O | HOH | 602 | 51.178 | 59.791 | 38.102 | 1.00 | 24.29 | O |
| HETATM | 6591 | O | HOH | 603 | 22.701 | 72.419 | 24.009 | 1.00 | 22.75 | O |
| HETATM | 6592 | O | HOH | 604 | 44.675 | 49.146 | 5.159 | 1.00 | 25.91 | O |
| HETATM | 6593 | O | HOH | 605 | 49.110 | 28.003 | 17.306 | 1.00 | 24.30 | O |
| HETATM | 6594 | O | HOH | 606 | 52.441 | 29.728 | 7.278 | 1.00 | 24.03 | O |
| HETATM | 6595 | O | HOH | 607 | 61.042 | 69.564 | 24.816 | 1.00 | 23.22 | O |
| HETATM | 6596 | O | HOH | 608 | 56.644 | 58.052 | 29.723 | 1.00 | 25.25 | O |
| HETATM | 6597 | O | HOH | 609 | 40.722 | 30.197 | 17.206 | 1.00 | 22.54 | O |
| HETATM | 6598 | O | HOH | 610 | 67.912 | 48.294 | 13.017 | 1.00 | 25.75 | O |
| HETATM | 6599 | O | HOH | 611 | 47.079 | 27.411 | 19.051 | 1.00 | 26.12 | O |
| HETATM | 6600 | O | HOH | 612 | 48.506 | 23.674 | 17.032 | 1.00 | 23.44 | O |
| HETATM | 6601 | O | HOH | 613 | 39.182 | 58.945 | 15.060 | 1.00 | 23.34 | O |
| HETATM | 6602 | O | HOH | 614 | 41.010 | 54.939 | -1.661 | 1.00 | 28.60 | O |
| HETATM | 6603 | O | HOH | 615 | 81.723 | 52.200 | -11.731 | 1.00 | 31.96 | O |
| HETATM | 6604 | O | HOH | 616 | 34.065 | 73.446 | 12.350 | 1.00 | 26.46 | O |
| HETATM | 6605 | O | HOH | 617 | 45.648 | 25.002 | 18.762 | 1.00 | 27.17 | O |
| HETATM | 6606 | O | HOH | 618 | 57.113 | 65.975 | 41.466 | 1.00 | 30.57 | O |
| HETATM | 6607 | O | HOH | 619 | 45.994 | 25.331 | 11.657 | 1.00 | 29.25 | O |
| HETATM | 6608 | O | HOH | 620 | 44.396 | 82.345 | 25.756 | 1.00 | 31.58 | O |
| HETATM | 6609 | O | HOH | 621 | 39.948 | 45.548 | 17.586 | 1.00 | 24.94 | O |
| HETATM | 6610 | O | HOH | 622 | 65.200 | 27.607 | 24.330 | 1.00 | 25.98 | O |
| HETATM | 6611 | O | HOH | 623 | 35.885 | 54.737 | 25.444 | 1.00 | 23.75 | O |
| HETATM | 6612 | O | HOH | 624 | 52.295 | 46.846 | 14.193 | 1.00 | 29.51 | O |
| HETATM | 6613 | O | HOH | 625 | 76.917 | 38.319 | 16.139 | 1.00 | 28.06 | O |
| HETATM | 6614 | O | HOH | 626 | 37.604 | 59.580 | 0.129 | 1.00 | 32.59 | O |
| HETATM | 6615 | O | HOH | 627 | 65.741 | 42.908 | 7.600 | 1.00 | 26.27 | O |
| HETATM | 6616 | O | HOH | 628 | 54.902 | 22.618 | 8.278 | 1.00 | 24.47 | O |
| HETATM | 6617 | O | HOH | 629 | 53.161 | 75.741 | 28.705 | 1.00 | 25.91 | O |
| HETATM | 6618 | O | HOH | 630 | 67.083 | 44.538 | -11.207 | 1.00 | 23.95 | O |
| HETATM | 6619 | O | HOH | 631 | 49.812 | 62.364 | 41.899 | 1.00 | 28.03 | O |
| HETATM | 6620 | O | HOH | 632 | 49.758 | 18.237 | 23.797 | 1.00 | 28.69 | O |
| HETATM | 6621 | O | HOH | 633 | 45.628 | 36.284 | 14.289 | 1.00 | 29.87 | O |
| HETATM | 6622 | O | HOH | 634 | 26.872 | 73.496 | 13.593 | 1.00 | 25.31 | O |
| HETATM | 6623 | O | HOH | 635 | 66.702 | 42.149 | 11.391 | 1.00 | 23.43 | O |
| HETATM | 6624 | O | HOH | 636 | 18.225 | 66.688 | 25.753 | 1.00 | 25.33 | O |
| HETATM | 6625 | O | HOH | 637 | 74.323 | 55.875 | 15.789 | 1.00 | 26.25 | O |
| HETATM | 6626 | O | HOH | 638 | 63.963 | 20.954 | 1.828 | 1.00 | 30.27 | O |
| HETATM | 6627 | O | HOH | 639 | 44.151 | 64.410 | 12.603 | 1.00 | 26.74 | O |
| HETATM | 6628 | O | HOH | 640 | 54.959 | 66.358 | 37.017 | 1.00 | 23.31 | O |
| HETATM | 6629 | O | HOH | 641 | 17.972 | 74.876 | 29.666 | 1.00 | 28.80 | O |
| HETATM | 6630 | O | HOH | 642 | 56.008 | 68.419 | 12.364 | 1.00 | 28.23 | O |
| HETATM | 6631 | O | HOH | 643 | 47.220 | 73.137 | 31.263 | 1.00 | 30.71 | O |
| HETATM | 6632 | O | HOH | 644 | 22.823 | 74.430 | 18.569 | 1.00 | 29.41 | O |
| HETATM | 6633 | O | HOH | 645 | 15.428 | 55.920 | 17.560 | 1.00 | 32.44 | O |
| HETATM | 6634 | O | HOH | 646 | 53.849 | 53.721 | 18.454 | 1.00 | 32.24 | O |
| HETATM | 6635 | O | HOH | 647 | 33.056 | 71.419 | 10.707 | 1.00 | 24.67 | O |
| HETATM | 6636 | O | HOH | 648 | 65.233 | 58.428 | 11.447 | 1.00 | 25.43 | O |
| HETATM | 6637 | O | HOH | 649 | 52.013 | 60.774 | 40.453 | 1.00 | 29.36 | O |
| HETATM | 6638 | O | HOH | 650 | 58.064 | 65.754 | -1.162 | 1.00 | 27.91 | O |
| HETATM | 6639 | O | HOH | 651 | 55.976 | 52.543 | 24.737 | 1.00 | 29.89 | O |
| HETATM | 6640 | O | HOH | 652 | 52.218 | 63.200 | 38.021 | 1.00 | 25.08 | O |
| HETATM | 6641 | O | HOH | 653 | 49.783 | 37.529 | -4.354 | 1.00 | 35.25 | O |
| HETATM | 6642 | O | HOH | 654 | 68.647 | 56.459 | 27.732 | 1.00 | 25.67 | O |
| HETATM | 6643 | O | HOH | 655 | 60.136 | 56.305 | -5.792 | 1.00 | 28.67 | O |
| HETATM | 6644 | O | HOH | 656 | 63.708 | 22.401 | 9.009 | 1.00 | 31.13 | O |
| HETATM | 6645 | O | HOH | 657 | 53.399 | 26.022 | 1.530 | 1.00 | 29.74 | O |
| HETATM | 6646 | O | HOH | 658 | 31.115 | 62.724 | 32.078 | 1.00 | 25.93 | O |
| HETATM | 6647 | O | HOH | 659 | 34.055 | 74.494 | 34.030 | 1.00 | 25.69 | O |
| HETATM | 6648 | O | HOH | 660 | 19.261 | 60.948 | 21.462 | 1.00 | 28.42 | O |

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HETATM 6649  O   HOH   661    40.822  41.382  10.100  1.00 34.86           O
HETATM 6650  O   HOH   662    46.728  53.621  -3.384  1.00 26.88           O
HETATM 6651  O   HOH   663    21.802  77.351  29.520  1.00 29.13           O
HETATM 6652  O   HOH   664    67.948  26.947  18.182  1.00 31.15           O
HETATM 6653  O   HOH   665    57.406  51.457  18.340  1.00 29.34           O
HETATM 6654  O   HOH   666    37.829  75.371  34.102  1.00 29.07           O
HETATM 6655  O   HOH   667    67.172  17.961  13.574  1.00 28.00           O
HETATM 6656  O   HOH   668    64.648  46.306 -15.001  1.00 33.38           O
HETATM 6657  O   HOH   669    59.906  51.324  17.314  1.00 27.82           O
HETATM 6658  O   HOH   670    67.124  35.455  10.005  1.00 21.37           O
HETATM 6659  O   HOH   671    25.238  74.882  15.039  1.00 27.05           O
HETATM 6660  O   HOH   672    59.326  57.054  31.186  1.00 29.59           O
HETATM 6661  O   HOH   673    49.045  44.150  15.083  1.00 26.35           O
HETATM 6662  O   HOH   674    47.345  82.492  29.307  1.00 29.64           O
HETATM 6663  O   HOH   675    43.705  79.984  36.388  1.00 29.57           O
HETATM 6664  O   HOH   676    31.602  63.912  22.506  1.00 28.55           O
HETATM 6665  O   HOH   677    26.337  45.015   3.873  1.00 27.15           O
HETATM 6666  O   HOH   678    47.219  42.961  16.758  1.00 28.85           O
HETATM 6667  O   HOH   679    40.895  77.899  13.209  1.00 31.83           O
HETATM 6668  O   HOH   680    64.128  18.113  11.267  1.00 30.44           O
HETATM 6669  O   HOH   681    46.709  50.728  12.754  1.00 28.40           O
HETATM 6670  O   HOH   682    56.885  24.110   7.331  1.00 29.36           O
HETATM 6671  O   HOH   683    45.959  82.433  23.626  1.00 35.03           O
HETATM 6672  O   HOH   684    64.851  57.541  16.275  1.00 31.54           O
HETATM 6673  O   HOH   685    56.241  60.441  32.522  1.00 32.11           O
HETATM 6674  O   HOH   686    13.257  71.212  23.500  1.00 30.60           O
HETATM 6675  O   HOH   687    51.325  18.490  11.095  1.00 29.75           O
HETATM 6676  O   HOH   688    71.696  34.150  -1.128  1.00 27.94           O
HETATM 6677  O   HOH   689    35.385  67.357   9.876  1.00 33.55           O
HETATM 6678  O   HOH   690    37.306  64.113  14.135  1.00 29.13           O
HETATM 6679  O   HOH   691    65.845  42.654 -13.105  1.00 27.52           O
HETATM 6680  O   HOH   692    41.199  48.665  -1.815  1.00 32.59           O
HETATM 6681  O   HOH   693    29.557  63.314  14.875  1.00 29.62           O
HETATM 6682  O   HOH   694    77.773  37.726   6.387  1.00 31.23           O
HETATM 6683  O   HOH   695    40.097  74.563  30.380  1.00 27.00           O
HETATM 6684  O   HOH   696    39.987  81.096  37.327  1.00 29.51           O
HETATM 6685  O   HOH   697    51.752  78.707   2.763  1.00 28.60           O
HETATM 6686  O   HOH   698    63.616  24.552  -2.642  1.00 29.78           O
HETATM 6687  O   HOH   699    41.396  62.219  14.438  1.00 27.00           O
HETATM 6688  O   HOH   700    35.595  62.002  13.844  1.00 27.81           O
HETATM 6689  O   HOH   701    69.671  52.593 -13.043  1.00 32.97           O
HETATM 6690  O   HOH   702    64.118  71.489  13.842  1.00 34.66           O
HETATM 6691  O   HOH   703    68.745  50.712 -14.569  1.00 28.93           O
HETATM 6692  O   HOH   704    49.565  42.876  -6.382  1.00 29.57           O
HETATM 6693  O   HOH   705    67.755  39.340  10.298  1.00 26.82           O
HETATM 6694  O   HOH   706    67.927  62.344   8.099  1.00 29.51           O
HETATM 6695  O   HOH   707    59.138  61.414  -3.991  1.00 41.13           O
HETATM 6696  O   HOH   708    70.494  51.236   3.721  1.00 33.45           O
HETATM 6697  O   HOH   709    65.553  35.018 -15.208  1.00 33.05           O
HETATM 6698  O   HOH   710    54.710  77.574  30.314  1.00 31.12           O
HETATM 6699  O   HOH   711    48.633  49.238  14.273  1.00 30.11           O
HETATM 6700  O   HOH   712    41.773  39.494  -2.747  1.00 31.34           O
HETATM 6701  O   HOH   713    72.619  54.600  -6.852  1.00 30.31           O
HETATM 6702  O   HOH   714    33.507  65.880  28.821  1.00 29.47           O
HETATM 6703  O   HOH   715    29.340  85.397  18.635  1.00 32.97           O
HETATM 6704  O   HOH   716    31.912  76.128  33.455  1.00 30.75           O
HETATM 6705  O   HOH   717    36.720  61.078  16.341  1.00 29.92           O
HETATM 6706  O   HOH   718    19.307  48.279  14.382  1.00 30.63           O
HETATM 6707  O   HOH   719    40.895  44.335  -6.266  1.00 29.41           O
HETATM 6708  O   HOH   720    62.416  66.949  35.034  1.00 31.32           O
HETATM 6709  O   HOH   721    73.701  50.855 -19.456  1.00 31.52           O
HETATM 6710  O   HOH   722    40.736  28.323   6.825  1.00 31.24           O
HETATM 6711  O   HOH   723    28.254  78.568  22.070  1.00 25.06           O
HETATM 6712  O   HOH   724    42.149  65.834   8.925  1.00 36.42           O
HETATM 6713  O   HOH   725    54.484  67.933  -8.050  1.00 31.76           O
HETATM 6714  O   HOH   726    56.730  73.963  34.639  1.00 32.97           O
HETATM 6715  O   HOH   727    19.721  61.568  13.586  1.00 30.67           O
HETATM 6716  O   HOH   728    76.707  57.259  15.765  1.00 29.35           O
HETATM 6717  O   HOH   729    47.029  25.705  15.702  1.00 26.34           O
HETATM 6718  O   HOH   730    75.737  53.983   9.023  1.00 32.57           O
HETATM 6719  O   HOH   731    44.210  23.023  11.259  1.00 31.76           O
HETATM 6720  O   HOH   732    53.832  56.551  28.486  1.00 41.17           O
HETATM 6721  O   HOH   733    25.375  74.786  17.915  1.00 31.25           O
HETATM 6722  O   HOH   734    53.105  81.007   3.765  1.00 33.95           O
HETATM 6723  O   HOH   735    41.395  76.318  31.882  1.00 29.17           O
HETATM 6724  O   HOH   736    62.558  20.429   7.861  1.00 29.81           O
HETATM 6725  O   HOH   737    75.553  30.173  23.040  1.00 46.38           O
HETATM 6726  O   HOH   738    73.614  41.132  10.695  1.00 32.35           O
HETATM 6727  O   HOH   739    76.769  35.491   5.052  1.00 35.35           O
HETATM 6728  O   HOH   740    80.184  56.221  27.164  1.00 34.76           O
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| HETATM | 6729 | O | HOH | 741 | 35.736 | 63.217 | 17.910 | 1.00 | 30.28 | O |
|--------|------|---|-----|-----|--------|--------|--------|------|-------|---|
| HETATM | 6730 | O | HOH | 742 | 31.672 | 36.438 | -1.820 | 1.00 | 35.09 | O |
| HETATM | 6731 | O | HOH | 743 | 59.441 | 42.972 | -10.394 | 1.00 | 31.87 | O |
| HETATM | 6732 | O | HOH | 744 | 49.225 | 27.378 | 23.532 | 1.00 | 34.99 | O |
| HETATM | 6733 | O | HOH | 745 | 51.033 | 70.797 | 41.458 | 1.00 | 35.82 | O |
| HETATM | 6734 | O | HOH | 746 | 49.032 | 71.989 | 39.750 | 1.00 | 29.24 | O |
| HETATM | 6735 | O | HOH | 747 | 50.672 | 18.527 | 3.936 | 1.00 | 38.55 | O |
| HETATM | 6736 | O | HOH | 748 | 56.079 | 67.571 | 39.395 | 1.00 | 31.51 | O |
| HETATM | 6737 | O | HOH | 749 | 39.644 | 49.384 | -4.088 | 1.00 | 30.17 | O |
| HETATM | 6738 | O | HOH | 750 | 56.121 | 40.635 | -6.476 | 1.00 | 32.28 | O |
| HETATM | 6739 | O | HOH | 751 | 81.155 | 24.391 | 16.166 | 1.00 | 32.62 | O |
| HETATM | 6740 | O | HOH | 752 | 16.345 | 71.446 | 16.294 | 1.00 | 30.62 | O |
| HETATM | 6741 | O | HOH | 753 | 23.612 | 52.227 | 12.365 | 1.00 | 37.92 | O |
| HETATM | 6742 | O | HOH | 754 | 78.674 | 51.305 | -2.049 | 1.00 | 32.36 | O |
| HETATM | 6743 | O | HOH | 755 | 40.616 | 72.840 | 9.816 | 1.00 | 33.11 | O |
| HETATM | 6744 | O | HOH | 756 | 68.774 | 54.169 | -0.120 | 1.00 | 32.67 | O |
| HETATM | 6745 | O | HOH | 757 | 49.951 | 39.759 | 22.488 | 1.00 | 47.70 | O |
| HETATM | 6746 | O | HOH | 758 | 38.642 | 58.540 | 7.999 | 1.00 | 32.64 | O |
| HETATM | 6747 | O | HOH | 759 | 29.547 | 52.501 | 1.732 | 1.00 | 34.07 | O |
| HETATM | 6748 | O | HOH | 760 | 75.842 | 46.476 | -19.646 | 1.00 | 31.02 | O |
| HETATM | 6749 | O | HOH | 761 | 27.987 | 56.774 | 20.632 | 1.00 | 34.14 | O |
| HETATM | 6750 | O | HOH | 762 | 44.532 | 51.511 | 3.799 | 1.00 | 32.50 | O |
| HETATM | 6751 | O | HOH | 763 | 54.089 | 50.184 | 12.174 | 1.00 | 29.07 | O |
| HETATM | 6752 | O | HOH | 764 | 32.613 | 80.980 | 28.411 | 1.00 | 30.37 | O |
| HETATM | 6753 | O | HOH | 765 | 12.929 | 72.050 | 26.005 | 1.00 | 34.51 | O |
| HETATM | 6754 | O | HOH | 766 | 64.225 | 22.579 | -0.959 | 1.00 | 35.44 | O |
| HETATM | 6755 | O | HOH | 767 | 42.536 | 36.280 | 14.513 | 1.00 | 36.93 | O |
| HETATM | 6756 | O | HOH | 768 | 34.476 | 73.084 | 38.137 | 1.00 | 31.36 | O |
| HETATM | 6757 | O | HOH | 769 | 72.931 | 42.614 | -2.484 | 1.00 | 35.03 | O |
| HETATM | 6758 | O | HOH | 770 | 49.842 | 46.715 | 15.367 | 1.00 | 33.25 | O |
| HETATM | 6759 | O | HOH | 771 | 45.461 | 22.695 | 23.716 | 1.00 | 35.13 | O |
| HETATM | 6760 | O | HOH | 772 | 29.552 | 80.066 | 7.156 | 1.00 | 40.65 | O |
| HETATM | 6761 | O | HOH | 773 | 54.038 | 75.947 | 34.979 | 1.00 | 40.34 | O |
| HETATM | 6762 | O | HOH | 774 | 55.818 | 80.082 | 0.409 | 1.00 | 34.69 | O |
| HETATM | 6763 | O | HOH | 775 | 59.973 | 20.332 | -0.741 | 1.00 | 31.82 | O |
| HETATM | 6764 | O | HOH | 776 | 45.399 | 70.238 | -9.026 | 1.00 | 33.58 | O |
| HETATM | 6765 | O | HOH | 777 | 44.794 | 84.913 | 26.260 | 1.00 | 42.34 | O |
| HETATM | 6766 | O | HOH | 778 | 44.183 | 23.888 | 21.502 | 1.00 | 41.57 | O |
| HETATM | 6767 | O | HOH | 779 | 77.864 | 27.157 | 21.109 | 1.00 | 37.26 | O |
| HETATM | 6768 | O | HOH | 780 | 66.376 | 64.716 | -3.051 | 1.00 | 31.79 | O |
| HETATM | 6769 | O | HOH | 781 | 61.751 | 72.991 | 18.784 | 1.00 | 33.77 | O |
| HETATM | 6770 | O | HOH | 782 | 78.674 | 23.627 | 7.871 | 1.00 | 30.93 | O |
| HETATM | 6771 | O | HOH | 783 | 74.092 | 36.844 | 24.316 | 1.00 | 33.70 | O |
| HETATM | 6772 | O | HOH | 784 | 49.034 | 74.252 | 37.585 | 1.00 | 32.90 | O |
| HETATM | 6773 | O | HOH | 785 | 29.890 | 78.039 | 31.289 | 1.00 | 41.56 | O |
| HETATM | 6774 | O | HOH | 786 | 53.317 | 60.760 | -9.489 | 1.00 | 32.11 | O |
| HETATM | 6775 | O | HOH | 787 | 41.913 | 78.306 | 43.612 | 1.00 | 31.73 | O |
| HETATM | 6776 | O | HOH | 788 | 74.563 | 40.929 | 14.354 | 1.00 | 28.47 | O |
| HETATM | 6777 | O | HOH | 789 | 42.282 | 78.658 | 29.485 | 1.00 | 30.26 | O |
| HETATM | 6778 | O | HOH | 790 | 46.497 | 43.940 | 19.468 | 1.00 | 41.99 | O |
| HETATM | 6779 | O | HOH | 791 | 16.327 | 56.994 | 10.870 | 1.00 | 30.37 | O |
| HETATM | 6780 | O | HOH | 792 | 28.236 | 84.158 | 16.262 | 1.00 | 36.68 | O |
| HETATM | 6781 | O | HOH | 793 | 47.432 | 64.680 | -0.990 | 1.00 | 33.28 | O |
| HETATM | 6782 | O | HOH | 794 | 47.886 | 39.653 | 17.623 | 1.00 | 36.89 | O |
| HETATM | 6783 | O | HOH | 795 | 58.076 | 74.417 | 12.757 | 1.00 | 30.83 | O |
| HETATM | 6784 | O | HOH | 796 | 68.564 | 68.587 | 21.496 | 1.00 | 34.00 | O |
| HETATM | 6785 | O | HOH | 797 | 42.096 | 22.714 | 12.801 | 1.00 | 31.57 | O |
| HETATM | 6786 | O | HOH | 798 | 69.485 | 45.250 | -18.708 | 1.00 | 35.03 | O |
| HETATM | 6787 | O | HOH | 799 | 57.344 | 10.310 | 11.010 | 1.00 | 36.27 | O |
| HETATM | 6788 | O | HOH | 800 | 53.878 | 53.866 | 14.131 | 1.00 | 29.02 | O |
| HETATM | 6789 | O | HOH | 801 | 78.012 | 39.562 | 4.409 | 1.00 | 37.12 | O |
| HETATM | 6790 | O | HOH | 802 | 82.649 | 25.076 | 0.912 | 1.00 | 36.25 | O |
| HETATM | 6791 | O | HOH | 803 | 55.285 | 52.191 | 20.090 | 1.00 | 32.80 | O |
| HETATM | 6792 | O | HOH | 804 | 51.246 | 21.295 | 7.047 | 1.00 | 38.87 | O |
| HETATM | 6793 | O | HOH | 805 | 20.004 | 48.511 | 6.583 | 1.00 | 31.14 | O |
| HETATM | 6794 | O | HOH | 806 | 53.943 | 73.884 | -5.312 | 1.00 | 35.10 | O |
| HETATM | 6795 | O | HOH | 807 | 41.640 | 75.238 | 9.998 | 1.00 | 31.86 | O |
| HETATM | 6796 | O | HOH | 808 | 45.554 | 32.615 | 13.875 | 1.00 | 32.18 | O |
| HETATM | 6797 | O | HOH | 809 | 47.887 | 72.025 | 50.589 | 1.00 | 38.02 | O |
| HETATM | 6798 | O | HOH | 810 | 85.773 | 31.661 | 1.633 | 1.00 | 40.43 | O |
| HETATM | 6799 | O | HOH | 811 | 62.377 | 13.074 | 7.147 | 1.00 | 36.89 | O |
| HETATM | 6800 | O | HOH | 812 | 69.186 | 35.165 | 19.634 | 1.00 | 40.06 | O |
| HETATM | 6801 | O | HOH | 813 | 32.999 | 81.204 | 31.206 | 1.00 | 40.07 | O |
| HETATM | 6802 | O | HOH | 814 | 52.762 | 77.604 | 37.004 | 1.00 | 36.25 | O |
| HETATM | 6803 | O | HOH | 815 | 61.473 | 54.776 | -7.476 | 1.00 | 27.75 | O |
| HETATM | 6804 | O | HOH | 816 | 52.458 | 18.929 | 8.578 | 1.00 | 38.93 | O |
| HETATM | 6805 | O | HOH | 817 | 30.120 | 55.588 | 9.518 | 1.00 | 38.20 | O |
| HETATM | 6806 | O | HOH | 818 | 28.630 | 67.327 | 9.361 | 1.00 | 34.85 | O |
| HETATM | 6807 | O | HOH | 819 | 45.204 | 51.176 | -2.036 | 1.00 | 32.00 | O |
| HETATM | 6808 | O | HOH | 820 | 82.025 | 44.349 | 32.234 | 1.00 | 32.59 | O |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HETATM | 6809 | O | HOH | 821 | 76.725 | 47.141 | 19.581 | 1.00 38.48 | O |
| HETATM | 6810 | O | HOH | 822 | 50.316 | 22.264 | 1.151 | 1.00 42.15 | O |
| HETATM | 6811 | O | HOH | 823 | 72.205 | 61.838 | -6.454 | 1.00 35.71 | O |
| HETATM | 6812 | O | HOH | 824 | 33.073 | 62.546 | 12.891 | 1.00 30.52 | O |
| HETATM | 6813 | O | HOH | 825 | 64.064 | 57.161 | 26.324 | 1.00 39.89 | O |
| HETATM | 6814 | O | HOH | 826 | 47.208 | 56.613 | 39.079 | 1.00 35.19 | O |
| HETATM | 6815 | O | HOH | 827 | 56.992 | 78.539 | 28.562 | 1.00 36.68 | O |
| HETATM | 6816 | O | HOH | 828 | 48.385 | 18.397 | 11.999 | 1.00 42.06 | O |
| HETATM | 6817 | O | HOH | 829 | 81.067 | 26.587 | 9.105 | 1.00 40.92 | O |
| HETATM | 6818 | O | HOH | 830 | 51.032 | 25.292 | -2.354 | 1.00 33.62 | O |
| HETATM | 6819 | O | HOH | 831 | 57.879 | 77.214 | 7.669 | 1.00 38.42 | O |
| HETATM | 6820 | O | HOH | 832 | 72.001 | 34.409 | -14.612 | 1.00 36.92 | O |
| HETATM | 6821 | O | HOH | 833 | 73.405 | 63.529 | 14.442 | 1.00 32.73 | O |
| HETATM | 6822 | O | HOH | 834 | 52.893 | 77.993 | -4.477 | 1.00 36.00 | O |
| HETATM | 6823 | O | HOH | 835 | 57.680 | 54.844 | 30.174 | 1.00 41.19 | O |
| HETATM | 6824 | O | HOH | 836 | 31.900 | 43.284 | -5.440 | 1.00 40.82 | O |
| HETATM | 6825 | O | HOH | 837 | 37.935 | 47.027 | -11.343 | 1.00 38.42 | O |
| HETATM | 6826 | O | HOH | 838 | 72.020 | 68.279 | 16.697 | 1.00 34.23 | O |
| HETATM | 6827 | O | HOH | 839 | 13.039 | 68.655 | 23.012 | 1.00 32.70 | O |
| HETATM | 6828 | O | HOH | 840 | 64.744 | 15.766 | 16.254 | 1.00 41.27 | O |
| HETATM | 6829 | O | HOH | 841 | 49.874 | 21.347 | 3.639 | 1.00 42.31 | O |
| HETATM | 6830 | O | HOH | 842 | 41.304 | 83.844 | 26.590 | 1.00 36.62 | O |
| HETATM | 6831 | O | HOH | 843 | 47.392 | 23.197 | 3.862 | 1.00 35.32 | O |
| HETATM | 6832 | O | HOH | 844 | 80.673 | 17.124 | 14.681 | 1.00 39.83 | O |
| HETATM | 6833 | O | HOH | 845 | 74.977 | 41.220 | 8.179 | 1.00 38.32 | O |
| HETATM | 6834 | O | HOH | 846 | 54.184 | 53.852 | 27.339 | 1.00 38.95 | O |
| HETATM | 6835 | O | HOH | 847 | 78.552 | 21.535 | 6.066 | 1.00 41.20 | O |
| HETATM | 6836 | O | HOH | 848 | 39.325 | 40.909 | 3.615 | 1.00 32.48 | O |
| HETATM | 6837 | O | HOH | 849 | 58.889 | 39.387 | -12.157 | 1.00 47.98 | O |
| HETATM | 6838 | O | HOH | 850 | 75.250 | 42.722 | 12.419 | 1.00 39.97 | O |
| HETATM | 6839 | O | HOH | 851 | 51.932 | 38.799 | 18.466 | 1.00 35.19 | O |
| HETATM | 6840 | O | HOH | 852 | 59.519 | 12.010 | 10.075 | 1.00 44.26 | O |
| HETATM | 6841 | O | HOH | 853 | 81.156 | 22.735 | 0.482 | 1.00 47.27 | O |
| HETATM | 6842 | O | HOH | 854 | 70.797 | 51.823 | -20.434 | 1.00 46.67 | O |
| HETATM | 6843 | O | HOH | 855 | 47.257 | 40.058 | -7.069 | 1.00 41.15 | O |
| HETATM | 6844 | O | HOH | 856 | 32.199 | 57.847 | 21.424 | 1.00 43.46 | O |
| HETATM | 6845 | O | HOH | 857 | 82.450 | 32.940 | 8.763 | 1.00 36.22 | O |
| HETATM | 6846 | O | HOH | 858 | 69.976 | 36.812 | 21.852 | 1.00 47.76 | O |
| HETATM | 6847 | O | HOH | 859 | 71.474 | 39.570 | 1.424 | 1.00 36.77 | O |
| HETATM | 6848 | O | HOH | 860 | 48.588 | 84.548 | 36.069 | 1.00 37.18 | O |
| HETATM | 6849 | O | HOH | 861 | 57.939 | 80.349 | 10.438 | 1.00 51.26 | O |
| HETATM | 6850 | O | HOH | 862 | 13.318 | 54.848 | 18.078 | 1.00 45.75 | O |
| HETATM | 6851 | O | HOH | 863 | 66.525 | 34.844 | -17.693 | 1.00 40.73 | O |
| HETATM | 6852 | O | HOH | 864 | 25.128 | 42.687 | -2.218 | 1.00 45.60 | O |
| HETATM | 6853 | O | HOH | 865 | 49.321 | 66.441 | -10.819 | 1.00 37.76 | O |
| HETATM | 6854 | O | HOH | 866 | 61.831 | 63.967 | -4.075 | 1.00 51.53 | O |
| HETATM | 6855 | O | HOH | 867 | 42.179 | 81.001 | 47.761 | 1.00 44.84 | O |
| HETATM | 6856 | O | HOH | 868 | 81.449 | 39.988 | -2.730 | 1.00 42.55 | O |
| HETATM | 6857 | O | HOH | 869 | 61.168 | 27.647 | -9.057 | 1.00 38.65 | O |
| HETATM | 6858 | O | HOH | 870 | 66.343 | 59.967 | -8.930 | 1.00 38.60 | O |
| HETATM | 6859 | O | HOH | 871 | 51.547 | 73.619 | 35.728 | 1.00 39.98 | O |
| HETATM | 6860 | O | HOH | 872 | 21.033 | 52.277 | 13.027 | 1.00 38.53 | O |
| HETATM | 6861 | O | HOH | 873 | 79.274 | 21.795 | -4.413 | 1.00 38.23 | O |
| HETATM | 6862 | O | HOH | 874 | 73.474 | 39.752 | -19.352 | 1.00 49.74 | O |
| HETATM | 6863 | O | HOH | 875 | 32.810 | 89.252 | 17.801 | 1.00 43.31 | O |
| HETATM | 6864 | O | HOH | 876 | 44.270 | 91.621 | 18.804 | 1.00 45.26 | O |
| HETATM | 6865 | O | HOH | 877 | 42.219 | 50.952 | -2.102 | 1.00 54.46 | O |
| HETATM | 6866 | O | HOH | 878 | 18.231 | 56.095 | 9.241 | 1.00 41.27 | O |
| HETATM | 6867 | O | HOH | 879 | 34.224 | 71.800 | 8.206 | 1.00 39.76 | O |
| HETATM | 6868 | O | HOH | 880 | 29.043 | 83.066 | 29.997 | 1.00 50.31 | O |
| HETATM | 6869 | O | HOH | 881 | 63.331 | 21.034 | 4.718 | 1.00 33.50 | O |
| HETATM | 6870 | O | HOH | 882 | 54.824 | 21.340 | -4.855 | 1.00 42.04 | O |
| HETATM | 6871 | O | HOH | 883 | 34.718 | 83.584 | 2.032 | 1.00 48.78 | O |
| HETATM | 6872 | O | HOH | 884 | 80.992 | 52.923 | -2.610 | 1.00 48.59 | O |
| HETATM | 6873 | O | HOH | 885 | 36.554 | 19.691 | 19.134 | 1.00 38.44 | O |
| HETATM | 6874 | O | HOH | 886 | 64.080 | 20.754 | -3.154 | 1.00 47.12 | O |
| HETATM | 6875 | O | HOH | 887 | 39.675 | 79.270 | 6.087 | 1.00 37.33 | O |
| HETATM | 6876 | O | HOH | 888 | 52.500 | 47.294 | -11.559 | 1.00 33.62 | O |
| HETATM | 6877 | O | HOH | 889 | 76.049 | 38.449 | -4.197 | 1.00 41.92 | O |
| HETATM | 6878 | O | HOH | 890 | 13.820 | 72.324 | 19.959 | 1.00 43.52 | O |
| HETATM | 6879 | O | HOH | 891 | 45.000 | 67.842 | 50.373 | 1.00 44.32 | O |
| HETATM | 6880 | O | HOH | 892 | 28.663 | 50.151 | -0.072 | 1.00 40.47 | O |
| HETATM | 6881 | O | HOH | 893 | 84.782 | 34.514 | -0.162 | 1.00 44.26 | O |
| HETATM | 6882 | O | HOH | 894 | 73.489 | 29.905 | 21.849 | 1.00 47.33 | O |
| HETATM | 6883 | O | HOH | 895 | 39.758 | 23.287 | 11.680 | 1.00 38.35 | O |
| HETATM | 6884 | O | HOH | 896 | 35.347 | 82.532 | 32.535 | 1.00 51.50 | O |
| HETATM | 6885 | O | HOH | 897 | 76.042 | 66.841 | 28.999 | 1.00 44.66 | O |
| HETATM | 6886 | O | HOH | 898 | 44.711 | 84.211 | 45.105 | 1.00 45.68 | O |
| HETATM | 6887 | O | HOH | 899 | 55.495 | 5.369 | 10.389 | 1.00 57.40 | O |
| HETATM | 6888 | O | HOH | 900 | 20.192 | 81.949 | 28.341 | 1.00 47.67 | O |

| HETATM | 6889 | O | HOH | 901 | 51.158 | 10.938 | 19.530 | 1.00 | 38.90 | O |
|--------|------|---|-----|-----|--------|--------|--------|------|-------|---|
| HETATM | 6890 | O | HOH | 902 | 27.023 | 80.918 | 10.035 | 1.00 | 39.40 | O |
| HETATM | 6891 | O | HOH | 903 | 30.175 | 34.352 | -1.451 | 1.00 | 41.43 | O |
| HETATM | 6892 | O | HOH | 904 | 42.332 | 88.504 | 24.948 | 1.00 | 33.46 | O |
| HETATM | 6893 | O | HOH | 905 | 28.224 | 55.687 | 11.427 | 1.00 | 49.33 | O |
| HETATM | 6894 | O | HOH | 906 | 47.092 | 19.856 | 2.083 | 1.00 | 55.80 | O |
| HETATM | 6895 | O | HOH | 907 | 20.471 | 79.065 | 30.914 | 1.00 | 42.45 | O |
| HETATM | 6896 | O | HOH | 908 | 54.560 | 42.039 | -9.895 | 1.00 | 45.35 | O |
| HETATM | 6897 | O | HOH | 909 | 82.951 | 40.082 | 28.752 | 1.00 | 51.14 | O |
| HETATM | 6898 | O | HOH | 910 | 75.582 | 23.315 | -10.200 | 1.00 | 40.26 | O |
| HETATM | 6899 | O | HOH | 911 | 16.659 | 54.932 | 14.801 | 1.00 | 39.40 | O |
| HETATM | 6900 | O | HOH | 912 | 71.055 | 48.676 | 12.654 | 1.00 | 38.62 | O |
| HETATM | 6901 | O | HOH | 913 | 73.061 | 66.725 | 8.835 | 1.00 | 40.82 | O |
| HETATM | 6902 | O | HOH | 914 | 48.816 | 86.217 | 23.384 | 1.00 | 48.90 | O |
| HETATM | 6903 | O | HOH | 915 | 51.932 | 7.189 | 4.258 | 1.00 | 47.09 | O |
| HETATM | 6904 | O | HOH | 916 | 38.159 | 74.263 | 47.339 | 1.00 | 48.20 | O |
| HETATM | 6905 | O | HOH | 917 | 33.288 | 83.625 | 26.955 | 1.00 | 45.92 | O |
| HETATM | 6906 | O | HOH | 918 | 43.698 | 63.895 | 2.658 | 1.00 | 44.91 | O |
| HETATM | 6907 | O | HOH | 919 | 49.175 | 49.868 | -9.876 | 1.00 | 41.07 | O |
| HETATM | 6908 | O | HOH | 920 | 68.193 | 73.928 | 15.102 | 1.00 | 47.20 | O |
| HETATM | 6909 | O | HOH | 921 | 25.690 | 50.476 | 0.789 | 1.00 | 51.79 | O |
| HETATM | 6910 | O | HOH | 922 | 75.717 | 43.784 | 5.183 | 1.00 | 51.56 | O |
| HETATM | 6911 | O | HOH | 923 | 90.522 | 39.141 | 22.222 | 1.00 | 50.76 | O |
| HETATM | 6912 | O | HOH | 924 | 64.372 | 75.769 | 8.397 | 1.00 | 45.54 | O |
| HETATM | 6913 | O | HOH | 925 | 38.767 | 92.010 | 15.938 | 1.00 | 45.99 | O |
| HETATM | 6914 | O | HOH | 926 | 45.206 | 12.784 | 16.283 | 1.00 | 45.94 | O |
| HETATM | 6915 | O | HOH | 927 | 32.556 | 57.735 | 3.274 | 1.00 | 44.62 | O |
| HETATM | 6916 | O | HOH | 928 | 80.311 | 54.758 | 19.042 | 1.00 | 42.29 | O |
| HETATM | 6917 | O | HOH | 929 | 57.984 | 11.004 | 4.554 | 1.00 | 48.70 | O |
| HETATM | 6918 | O | HOH | 930 | 33.237 | 67.899 | 8.218 | 1.00 | 48.72 | O |
| HETATM | 6919 | O | HOH | 931 | 66.558 | 65.330 | -6.169 | 1.00 | 50.38 | O |
| HETATM | 6920 | O | HOH | 932 | 54.813 | 50.451 | 15.884 | 1.00 | 45.79 | O |
| HETATM | 6921 | O | HOH | 933 | 58.643 | 39.048 | -9.826 | 1.00 | 55.39 | O |
| HETATM | 6922 | O | HOH | 934 | 45.751 | 27.749 | -1.249 | 1.00 | 45.14 | O |
| HETATM | 6923 | O | HOH | 935 | 58.519 | 69.311 | 38.961 | 1.00 | 48.81 | O |
| HETATM | 6924 | O | HOH | 936 | 54.605 | 62.607 | -10.854 | 1.00 | 48.49 | O |
| HETATM | 6925 | O | HOH | 937 | 82.921 | 35.243 | 28.514 | 1.00 | 48.30 | O |
| HETATM | 6926 | O | HOH | 938 | 38.846 | 65.204 | 11.859 | 1.00 | 43.41 | O |
| HETATM | 6927 | O | HOH | 939 | 30.961 | 21.939 | 18.337 | 1.00 | 41.29 | O |
| HETATM | 6928 | O | HOH | 940 | 49.022 | 67.588 | -15.795 | 1.00 | 62.58 | O |
| HETATM | 6929 | O | HOH | 941 | 49.328 | 80.374 | -10.479 | 1.00 | 55.68 | O |
| HETATM | 6930 | O | HOH | 942 | 58.639 | 8.124 | 12.035 | 1.00 | 41.75 | O |
| HETATM | 6931 | O | HOH | 943 | 61.580 | 13.383 | -0.555 | 1.00 | 52.28 | O |
| HETATM | 6932 | O | HOH | 944 | 17.910 | 62.192 | 9.473 | 1.00 | 47.48 | O |
| HETATM | 6933 | O | HOH | 945 | 57.847 | 61.413 | 48.977 | 1.00 | 43.82 | O |
| HETATM | 6934 | O | HOH | 946 | 81.319 | 56.958 | 20.821 | 1.00 | 51.75 | O |
| HETATM | 6935 | O | HOH | 947 | 60.165 | 75.018 | 34.670 | 1.00 | 45.96 | O |
| HETATM | 6936 | O | HOH | 948 | 52.700 | 89.379 | 7.248 | 1.00 | 58.30 | O |
| HETATM | 6937 | O | HOH | 949 | 36.735 | 42.855 | -5.599 | 1.00 | 48.27 | O |
| HETATM | 6938 | O | HOH | 950 | 75.449 | 48.396 | 17.543 | 1.00 | 49.30 | O |
| HETATM | 6939 | O | HOH | 951 | 42.166 | 74.314 | 5.463 | 1.00 | 44.25 | O |
| HETATM | 6940 | O | HOH | 952 | 83.765 | 27.679 | 11.706 | 1.00 | 43.17 | O |
| HETATM | 6941 | O | HOH | 953 | 58.586 | 59.766 | -15.821 | 1.00 | 55.49 | O |
| HETATM | 6942 | O | HOH | 954 | 43.405 | 83.883 | 35.514 | 1.00 | 62.96 | O |
| HETATM | 6943 | O | HOH | 955 | 57.751 | 8.647 | 17.562 | 1.00 | 52.61 | O |
| HETATM | 6944 | O | HOH | 956 | 75.015 | 32.803 | -14.442 | 1.00 | 58.48 | O |
| HETATM | 6945 | O | HOH | 957 | 31.031 | 19.411 | 16.408 | 1.00 | 48.64 | O |
| HETATM | 6946 | O | HOH | 958 | 55.624 | 81.537 | 31.635 | 1.00 | 54.82 | O |
| HETATM | 6947 | O | HOH | 959 | 74.706 | 67.599 | 19.998 | 1.00 | 44.80 | O |
| HETATM | 6948 | O | HOH | 960 | 90.241 | 25.081 | 18.115 | 1.00 | 56.06 | O |
| HETATM | 6949 | O | HOH | 961 | 22.744 | 54.835 | 8.516 | 1.00 | 49.75 | O |
| HETATM | 6950 | O | HOH | 962 | 88.086 | 42.082 | 32.172 | 1.00 | 54.52 | O |
| HETATM | 6951 | O | HOH | 963 | 41.632 | 65.161 | 11.377 | 1.00 | 49.89 | O |
| HETATM | 6952 | O | HOH | 964 | 39.819 | 84.344 | 28.498 | 1.00 | 51.45 | O |
| HETATM | 6953 | O | HOH | 965 | 30.678 | 88.550 | 21.754 | 1.00 | 53.22 | O |
| HETATM | 6954 | O | HOH | 966 | 51.494 | 20.827 | -3.030 | 1.00 | 53.46 | O |
| HETATM | 6955 | O | HOH | 967 | 57.060 | 58.943 | -10.523 | 1.00 | 50.99 | O |
| HETATM | 6956 | O | HOH | 968 | 15.115 | 74.981 | 22.830 | 1.00 | 47.85 | O |
| HETATM | 6957 | O | HOH | 969 | 70.604 | 62.715 | 11.997 | 1.00 | 50.73 | O |
| HETATM | 6958 | O | HOH | 970 | 42.640 | 88.757 | 13.128 | 1.00 | 52.04 | O |
| HETATM | 6959 | O | HOH | 971 | 46.042 | 48.722 | -9.101 | 1.00 | 57.28 | O |
| HETATM | 6960 | O | HOH | 972 | 72.703 | 71.485 | 5.603 | 1.00 | 55.81 | O |
| HETATM | 6961 | O | HOH | 973 | 41.542 | 37.066 | -3.330 | 1.00 | 45.54 | O |
| HETATM | 6962 | O | HOH | 974 | 86.413 | 40.711 | 21.042 | 1.00 | 65.95 | O |
| HETATM | 6963 | O | HOH | 975 | 34.347 | 75.574 | 4.514 | 1.00 | 49.96 | O |
| HETATM | 6964 | O | HOH | 976 | 61.862 | 39.476 | 24.035 | 0.50 | 21.56 | O |
| HETATM | 6965 | O | HOH | 977 | 45.042 | 49.192 | 24.034 | 0.50 | 17.96 | O |
| HETATM | 6966 | O | HOH | 978 | 39.177 | 52.578 | 24.034 | 0.50 | 22.56 | O |
| HETATM | 6967 | O | HOH | 979 | 56.084 | 42.797 | 24.049 | 0.50 | 18.35 | O |
| HETATM | 6968 | O | HOH | 980 | 42.610 | 40.713 | 13.277 | 1.00 | 25.58 | O |

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HETATM 6969  O    HOH   981      61.762  22.109   0.623  1.00 27.03           O
HETATM 6970  O    HOH   982      60.798  55.526  27.120  1.00 25.62           O
HETATM 6971  O    HOH   983      45.726  80.815  27.697  1.00 26.67           O
HETATM 6972  O    HOH   984      33.643  62.410  19.248  1.00 28.11           O
HETATM 6973  O    HOH   985      55.515  53.696  22.364  1.00 27.84           O
HETATM 6974  O    HOH   986      33.211  59.860  32.077  1.00 26.03           O
HETATM 6975  O    HOH   987      32.402  55.103  16.158  1.00 26.40           O
HETATM 6976  O    HOH   988      49.103  40.086  -4.714  1.00 38.75           O
HETATM 6977  O    HOH   989      42.973  80.974  28.270  1.00 30.98           O
HETATM 6978  O    HOH   990      32.647  59.484  19.573  1.00 31.01           O
HETATM 6979  O    HOH   991      64.255  29.399  26.239  1.00 31.45           O
HETATM 6980  O    HOH   992      57.345  63.545   0.200  1.00 30.05           O
HETATM 6981  O    HOH   993      71.844  41.260  14.011  1.00 30.77           O
HETATM 6982  O    HOH   994      51.848  24.156   0.153  1.00 31.37           O
HETATM 6983  O    HOH   995      75.273  57.464  -6.871  1.00 33.22           O
HETATM 6984  O    HOH   996      47.117  70.792  -5.509  1.00 38.66           O
HETATM 6985  O    HOH   997      63.580  71.623  16.862  1.00 35.90           O
HETATM 6986  O    HOH   998      70.038  29.955  14.603  1.00 30.42           O
HETATM 6987  O    HOH   999      51.911  75.942  -5.336  1.00 32.10           O
HETATM 6988  O    HOH  1000      55.676  52.233  13.129  1.00 36.62           O
HETATM 6989  O    HOH  1001      70.416  37.374  14.648  1.00 29.45           O
HETATM 6990  O    HOH  1002      70.601  61.206  13.735  1.00 39.59           O
HETATM 6991  O    HOH  1003      48.365  37.294  16.198  1.00 32.18           O
HETATM 6992  O    HOH  1004      34.596  52.624  -0.011  1.00 30.92           O
HETATM 6993  O    HOH  1005      53.640  46.684  16.486  1.00 35.96           O
HETATM 6994  O    HOH  1006      52.577  52.474  12.156  1.00 33.63           O
HETATM 6995  O    HOH  1007      64.896  73.773   6.762  1.00 37.54           O
HETATM 6996  O    HOH  1008      77.114  44.462 -20.640  1.00 35.84           O
HETATM 6997  O    HOH  1009      57.373  68.449  -1.294  1.00 29.11           O
HETATM 6998  O    HOH  1010      59.295  15.277   5.588  1.00 31.92           O
HETATM 6999  O    HOH  1011      29.856  81.576  27.715  1.00 32.85           O
HETATM 7000  O    HOH  1012      50.242  54.925  26.792  1.00 34.36           O
HETATM 7001  O    HOH  1013      53.665  44.213  24.033  0.50 31.68           O
HETATM 7002  O    HOH  1014      26.402  76.618  19.543  1.00 33.92           O
HETATM 7003  O    HOH  1015      71.860  38.186  -0.736  1.00 34.55           O
HETATM 7004  O    HOH  1016      75.703  17.985   7.160  1.00 35.04           O
HETATM 7005  O    HOH  1017      51.472  52.224  18.905  1.00 35.33           O
HETATM 7006  O    HOH  1018      47.069  22.607  19.052  1.00 34.30           O
HETATM 7007  O    HOH  1019      71.380  37.432  19.486  1.00 38.39           O
HETATM 7008  O    HOH  1020      71.891  32.395  17.971  1.00 34.61           O
HETATM 7009  O    HOH  1021      48.205  84.582  27.791  1.00 37.32           O
HETATM 7010  O    HOH  1022      56.994  41.976  -9.137  1.00 43.51           O
HETATM 7011  O    HOH  1023      68.075  62.403  11.240  1.00 33.78           O
HETATM 7012  O    HOH  1024      67.480  40.486   8.011  1.00 43.53           O
HETATM 7013  O    HOH  1025      45.254  82.461  36.841  1.00 34.90           O
HETATM 7014  O    HOH  1026      40.753  78.492  40.792  1.00 35.62           O
HETATM 7015  O    HOH  1027      32.367  65.276  24.815  1.00 31.27           O
HETATM 7016  O    HOH  1028      44.005  37.936  16.571  1.00 34.76           O
HETATM 7017  O    HOH  1029      41.969  65.947  13.858  1.00 40.29           O
HETATM 7018  O    HOH  1030      14.755  67.112   8.241  1.00 36.11           O
HETATM 7019  O    HOH  1031      35.515  65.044  11.873  1.00 32.86           O
HETATM 7020  O    HOH  1032      24.116  78.284  29.167  1.00 40.87           O
HETATM 7021  O    HOH  1033      69.472  44.640   5.835  1.00 44.12           O
HETATM 7022  O    HOH  1034      71.579  53.459   2.643  1.00 44.58           O
HETATM 7023  O    HOH  1035      43.100  51.796  -8.854  1.00 35.01           O
HETATM 7024  O    HOH  1036      33.852  60.337  22.170  1.00 35.07           O
HETATM 7025  O    HOH  1037      68.419  29.814  18.251  1.00 43.47           O
HETATM 7026  O    HOH  1038      71.399  36.338  16.777  1.00 34.15           O
HETATM 7027  O    HOH  1039      38.082  28.026   6.439  1.00 37.50           O
HETATM 7028  O    HOH  1040      20.386  58.985  22.646  1.00 40.13           O
HETATM 7029  O    HOH  1041      70.791  30.022  17.381  1.00 33.62           O
HETATM 7030  O    HOH  1042      39.983  77.270  10.436  1.00 42.60           O
HETATM 7031  O    HOH  1043      67.226  53.984 -12.300  1.00 36.53           O
HETATM 7032  O    HOH  1044      21.695  74.910  30.404  1.00 34.37           O
HETATM 7033  O    HOH  1045      72.787  18.375   6.961  1.00 42.34           O
HETATM 7034  O    HOH  1046      20.654  63.131  22.203  1.00 35.76           O
HETATM 7035  O    HOH  1047      31.960  78.931  32.765  1.00 43.06           O
HETATM 7036  O    HOH  1048      54.157   7.855  11.282  1.00 40.64           O
HETATM 7037  O    HOH  1049      22.309  62.317  24.034  0.50 31.84           O
HETATM 7038  O    HOH  1050      51.609  69.890  43.678  1.00 47.48           O
HETATM 7039  O    HOH  1051      30.479  66.782   7.529  1.00 44.06           O
HETATM 7040  O    HOH  1052      55.059  77.328  32.882  1.00 45.76           O
HETATM 7041  O    HOH  1053      85.680  36.239  29.762  1.00 45.21           O
HETATM 7042  O    HOH  1054      65.839  73.059  16.956  1.00 42.04           O
HETATM 7043  O    HOH  1055      54.846  49.661  20.599  1.00 37.51           O
HETATM 7044  O    HOH  1056      58.256  59.386  33.722  1.00 42.00           O
HETATM 7045  O    HOH  1057      65.944  57.084  13.698  1.00 37.69           O
HETATM 7046  O    HOH  1058      73.404  34.678  25.614  1.00 47.09           O
HETATM 7047  O    HOH  1059      40.551  51.217  -7.633  1.00 45.20           O
HETATM 7048  O    HOH  1060      42.100  76.222  47.161  1.00 39.30           O
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HETATM 7049  O   HOH  1061    50.831  45.529  18.496  1.00 44.51           O
HETATM 7050  O   HOH  1062    13.192  69.813  18.777  1.00 45.43           O
HETATM 7051  O   HOH  1063    42.975  50.511   1.486  1.00 37.87           O
HETATM 7052  O   HOH  1064    56.550  14.388  -0.107  1.00 40.33           O
HETATM 7053  O   HOH  1065    64.835  32.342 -14.240  1.00 43.30           O
HETATM 7054  O   HOH  1066    51.733  49.277  13.107  1.00 39.96           O
HETATM 7055  O   HOH  1067    52.434  87.375  11.987  1.00 45.02           O
HETATM 7056  O   HOH  1068    69.761  16.982  13.047  1.00 36.23           O
HETATM 7057  O   HOH  1069    15.124  73.595  26.093  1.00 39.49           O
HETATM 7058  O   HOH  1070    83.899  30.602   8.907  1.00 45.50           O
HETATM 7059  O   HOH  1071    42.130  80.236  38.659  1.00 41.98           O
HETATM 7060  O   HOH  1072    40.456  40.716  -4.886  1.00 45.96           O
HETATM 7061  O   HOH  1073    42.212  82.167   0.382  1.00 41.49           O
HETATM 7062  O   HOH  1074    25.884  84.369  16.920  1.00 44.81           O
HETATM 7063  O   HOH  1075    74.885  44.539 -18.066  1.00 40.05           O
HETATM 7064  O   HOH  1076    80.970  43.497  -7.221  1.00 45.24           O
HETATM 7065  O   HOH  1077    69.475  35.086  24.034  0.50 41.66           O
HETATM 7066  O   HOH  1078    69.991  59.031  27.395  1.00 36.48           O
HETATM 7067  O   HOH  1079    27.970  68.331  30.106  1.00 37.40           O
HETATM 7068  O   HOH  1080    67.608  51.635 -17.017  1.00 47.92           O
HETATM 7069  O   HOH  1081    62.658  23.434  -6.784  1.00 48.60           O
HETATM 7070  O   HOH  1082    79.319  55.656  -2.200  1.00 45.80           O
HETATM 7071  O   HOH  1083    19.053  57.575  20.041  1.00 43.84           O
HETATM 7072  O   HOH  1084    77.578  70.315  14.257  1.00 45.25           O
HETATM 7073  O   HOH  1085    52.897  44.552 -12.367  1.00 43.96           O
HETATM 7074  O   HOH  1086    28.157  81.058  23.056  1.00 42.21           O
HETATM 7075  O   HOH  1087    38.138  42.078  -2.792  1.00 47.30           O
HETATM 7076  O   HOH  1088    19.107  53.596  15.691  1.00 46.37           O
HETATM 7077  O   HOH  1089    67.239  17.948   1.042  1.00 45.45           O
HETATM 7078  O   HOH  1090    39.076  79.288  -0.715  1.00 45.27           O
HETATM 7079  O   HOH  1091    34.286  88.752  11.664  1.00 37.88           O
HETATM 7080  O   HOH  1092    24.838  81.795  21.586  1.00 49.48           O
HETATM 7081  O   HOH  1093    43.385  63.603   0.055  1.00 36.62           O
HETATM 7082  O   HOH  1094    42.459  22.766   9.000  1.00 45.67           O
HETATM 7083  O   HOH  1095    39.851  38.770   4.722  1.00 42.05           O
HETATM 7084  O   HOH  1096    27.927  62.542  25.741  1.00 45.07           O
HETATM 7085  O   HOH  1097    26.596  66.480  29.448  1.00 42.63           O
HETATM 7086  O   HOH  1098    80.705  27.320  -7.329  1.00 43.50           O
HETATM 7087  O   HOH  1099    47.391  61.543  41.647  1.00 40.15           O
HETATM 7088  O   HOH  1100    49.163  59.061  39.325  1.00 42.50           O
HETATM 7089  O   HOH  1101    37.723  62.950   9.266  1.00 43.51           O
HETATM 7090  O   HOH  1102    42.520  86.336  26.203  1.00 49.44           O
HETATM 7091  O   HOH  1103    44.505  23.800   1.579  1.00 45.86           O
HETATM 7092  O   HOH  1104    46.627  88.306   7.164  1.00 37.56           O
HETATM 7093  O   HOH  1105    73.060  28.520 -10.355  1.00 48.50           O
HETATM 7094  O   HOH  1106    11.418  72.212  21.577  1.00 50.61           O
HETATM 7095  O   HOH  1107    66.757  20.290  -0.301  1.00 42.88           O
HETATM 7096  O   HOH  1108    73.316  36.174  -1.352  1.00 40.32           O
HETATM 7097  O   HOH  1109    57.133  35.676 -13.886  1.00 43.40           O
HETATM 7098  O   HOH  1110    89.986  29.735  16.416  1.00 49.27           O
HETATM 7099  O   HOH  1111    33.708  63.408  10.630  1.00 46.18           O
HETATM 7100  O   HOH  1112    38.911  70.260  -3.463  1.00 46.09           O
HETATM 7101  O   HOH  1113    42.762  65.664  -2.740  1.00 43.70           O
HETATM 7102  O   HOH  1114    34.657  56.534  21.172  1.00 37.47           O
HETATM 7103  O   HOH  1115    42.540  19.989  12.547  1.00 46.34           O
HETATM 7104  O   HOH  1116    60.339  20.600  -3.277  1.00 43.92           O
HETATM 7105  O   HOH  1117    36.098  74.062  44.276  1.00 46.53           O
HETATM 7106  O   HOH  1118    81.188  40.130  11.020  1.00 36.46           O
HETATM 7107  O   HOH  1119    53.402  63.761  50.757  1.00 47.52           O
HETATM 7108  O   HOH  1120    71.162  69.131  20.303  1.00 43.59           O
HETATM 7109  O   HOH  1121    43.732   7.788  10.755  1.00 44.69           O
HETATM 7110  O   HOH  1122    68.240  59.225  13.989  1.00 44.59           O
HETATM 7111  O   HOH  1123    17.710  55.814  19.118  1.00 37.35           O
HETATM 7112  O   HOH  1124    34.450  56.940   1.618  1.00 42.86           O
HETATM 7113  O   HOH  1125    29.605  82.811  25.595  1.00 45.49           O
HETATM 7114  O   HOH  1126    43.635  78.674  46.819  1.00 44.12           O
HETATM 7115  O   HOH  1127    71.552  60.110 -10.367  1.00 46.00           O
HETATM 7116  O   HOH  1128    53.675  83.677  29.170  1.00 46.16           O
HETATM 7117  O   HOH  1129    79.968  44.910  26.163  1.00 44.77           O
HETATM 7118  O   HOH  1130    63.917  62.138  50.284  1.00 46.62           O
HETATM 7119  O   HOH  1131    51.348  57.617 -15.510  1.00 49.27           O
HETATM 7120  O   HOH  1132    69.091  50.240 -18.945  1.00 45.77           O
HETATM 7121  O   HOH  1133    73.114  17.017  11.159  1.00 45.26           O
HETATM 7122  O   HOH  1134    33.372  59.556   4.951  1.00 49.88           O
HETATM 7123  O   HOH  1135    65.039  49.316 -16.118  1.00 47.78           O
HETATM 7124  O   HOH  1136    56.903  79.340  -1.979  1.00 52.18           O
HETATM 7125  O   HOH  1137    61.154  10.701  16.668  1.00 46.63           O
HETATM 7126  O   HOH  1138    48.529  24.882  -2.984  1.00 46.16           O
HETATM 7127  O   HOH  1139    27.353  70.062  -6.425  1.00 41.12           O
HETATM 7128  O   HOH  1140    83.520  37.614  -6.367  1.00 45.23           O
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HETATM 7129  O   HOH  1141      45.705  78.639  48.562  1.00 42.61           O
HETATM 7130  O   HOH  1142      46.460  12.380   4.691  1.00 49.21           O
HETATM 7131  O   HOH  1143      39.908  78.974  45.027  1.00 48.70           O
HETATM 7132  O   HOH  1144      29.080  21.298  19.817  1.00 44.43           O
HETATM 7133  O   HOH  1145      86.451  18.574  10.104  1.00 48.60           O
HETATM 7134  O   HOH  1146      81.118  20.627   5.694  1.00 42.85           O
HETATM 7135  O   HOH  1147      83.337  25.279  -1.648  1.00 44.61           O
HETATM 7136  O   HOH  1148      65.680  34.543  26.278  1.00 39.74           O
HETATM 7137  O   HOH  1149      47.451   9.592  15.947  1.00 44.94           O
HETATM 7138  O   HOH  1150      49.030  81.631  47.403  1.00 44.42           O
HETATM 7139  O   HOH  1151      50.057   7.027   6.737  1.00 45.85           O
HETATM 7140  O   HOH  1152      73.324  43.111   4.598  1.00 43.85           O
HETATM 7141  O   HOH  1153      53.116  46.400  25.974  1.00 47.82           O
HETATM 7142  O   HOH  1154      72.736  45.268  10.352  1.00 42.50           O
HETATM 7143  O   HOH  1155      51.145  30.958  -8.481  1.00 45.73           O
HETATM 7144  O   HOH  1156      44.896  64.391  -1.512  1.00 42.80           O
HETATM 7145  O   HOH  1157      18.789  65.141  23.732  1.00 41.69           O
HETATM 7146  O   HOH  1158      70.859  62.866  15.269  1.00 38.81           O
HETATM 7147  O   HOH  1159      47.675  48.444  24.674  1.00 44.65           O
HETATM 7148  O   HOH  1160      54.935   8.520  14.096  1.00 46.47           O
HETATM 7149  O   HOH  1161      45.162  19.172  12.740  1.00 50.88           O
HETATM 7150  O   HOH  1162      58.399  13.920   3.468  1.00 47.39           O
HETATM 7151  O   HOH  1163      59.753  13.132   7.409  1.00 51.84           O
HETATM 7152  O   HOH  1164      73.364  46.852   3.559  1.00 45.49           O
HETATM 7153  O   HOH  1165      41.258  62.876  -6.597  1.00 48.48           O
HETATM 7154  O   HOH  1166      46.910  81.144  48.476  1.00 48.42           O
HETATM 7155  O   HOH  1167      30.157  71.463  33.054  1.00 49.71           O
HETATM 7156  O   HOH  1168      12.333  68.430   8.425  1.00 51.99           O
HETATM 7157  O   HOH  1169      23.528  83.020  23.579  1.00 49.21           O
HETATM 7158  O   HOH  1170      63.449  67.828  -3.523  1.00 47.78           O
HETATM 7159  O   HOH  1171      66.705  44.163 -18.047  1.00 51.66           O
HETATM 7160  O   HOH  1172      39.075  70.348  47.911  1.00 51.28           O
HETATM 7161  O   HOH  1173      50.234  26.574  -8.928  1.00 49.98           O
HETATM 7162  O   HOH  1174      77.261  18.973   5.469  1.00 47.74           O
HETATM 7163  O   HOH  1175      25.284  80.863  29.260  1.00 48.76           O
HETATM 7164  O   HOH  1176      33.885  55.348  -0.277  1.00 40.99           O
HETATM 7165  O   HOH  1177      70.743  34.595 -17.423  1.00 51.29           O
HETATM 7166  O   HOH  1178      59.656  69.852  -0.851  1.00 49.30           O
HETATM 7167  O   HOH  1179      68.600  14.783   5.686  1.00 51.16           O
HETATM 7168  O   HOH  1180      54.393  79.045  43.881  1.00 46.98           O
HETATM 7169  O   HOH  1181      60.931  80.302  21.628  1.00 48.38           O
HETATM 7170  O   HOH  1182      54.275  47.821  23.648  1.00 49.36           O
HETATM 7171  O   HOH  1183      41.133  63.786  -3.946  1.00 52.67           O
HETATM 7172  O   HOH  1184      29.971  47.764  -5.917  1.00 52.47           O
HETATM 7173  O   HOH  1185      40.794  15.547  20.035  1.00 47.97           O
HETATM 7174  O   HOH  1186      74.470  65.578  11.098  1.00 48.97           O
HETATM 7175  O   HOH  1187      53.924  70.395  -8.766  1.00 48.83           O
HETATM 7176  O   HOH  1188      77.753  43.351  11.064  1.00 49.61           O
HETATM 7177  O   HOH  1189      67.486  18.924  -5.021  1.00 48.63           O
HETATM 7178  O   HOH  1190      31.210  63.536  34.557  1.00 48.27           O
HETATM 7179  O   HOH  1191      17.780  81.250  21.183  1.00 52.94           O
HETATM 7180  O   HOH  1192      36.740  52.048  -6.733  1.00 48.77           O
MASTER      376    0    2   42   24    0    0    6 7178    2    0   66
END
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HEADER    LYASE                                   30-JUN-00   1F8M
TITLE     CRYSTAL STRUCTURE OF 3-BROMOPYRUVATE MODIFIED ISOCITRATE
TITLE    2 LYASE (ICL) FROM MYCOBACTERIUM TUBERCULOSIS
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: ISOCITRATE LYASE;
COMPND   3 CHAIN: A, B, C, D;
COMPND   4 SYNONYM: ICL;
COMPND   5 EC: 4.1.3.1;
COMPND   6 ENGINEERED: YES
SOURCE    MOL_ID: 1;
SOURCE   2 ORGANISM_SCIENTIFIC: MYCOBACTERIUM TUBERCULOSIS;
SOURCE   3 ORGANISM_COMMON: BACTERIA;
SOURCE   4 STRAIN: H37RV;
SOURCE   5 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE   6 EXPRESSION_SYSTEM_COMMON: BACTERIA;
SOURCE   7 EXPRESSION_SYSTEM_VECTOR_TYPE: PLASMID;
SOURCE   8 EXPRESSION_SYSTEM_PLASMID: PET30B
KEYWDS    ALPHA-BETA BARREL, HELIX-SWAPPING, CLOSED CONFORMATION,
KEYWDS   2 BROMOPYUVATE MODIFICATION
EXPDTA    X-RAY DIFFRACTION
AUTHOR    V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,D.G.RUSSELL,
AUTHOR   2 W.R.JACOBS JR.,J.C.SACCHETTINI
REVDAT   1   30-DEC-00 1F8M    0
JRNL        AUTH   V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,
JRNL        AUTH 2 D.G.RUSSELL,W.R.JACOBS JR.,J.C.SACCHETTINI
JRNL        TITL   STRUCTURE OF ISOCITRATE LYASE, A PERSISTENCE
JRNL        TITL 2 FACTOR OF MYCOBACTERIUM TUBERCULOSIS
JRNL        REF    NAT.STRUCT.BIOL.              V.   7   663 2000
JRNL        REFN   ASTM NSBIEW  US ISSN 1072-8368
REMARK   1
REMARK   2
REMARK   2 RESOLUTION. 1.80 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM      : CNS 1.0
REMARK   3   AUTHORS      : BRUNGER,ADAMS,CLORE,DELANO,GROS,GROSSE-
REMARK   3                : KUNSTLEVE,JIANG,KUSZEWSKI,NILGES, PANNU,
REMARK   3                : READ,RICE,SIMONSON,WARREN
REMARK   3
REMARK   3   REFINEMENT TARGET : ENGH & HUBER
REMARK   3
REMARK   3   DATA USED IN REFINEMENT.
REMARK   3    RESOLUTION RANGE HIGH (ANGSTROMS) : 1.80
REMARK   3    RESOLUTION RANGE LOW  (ANGSTROMS) : 19.86
REMARK   3    DATA CUTOFF            (SIGMA(F)) : 2.000
REMARK   3    OUTLIER CUTOFF HIGH (RMS(ABS(F))) : NULL
REMARK   3    COMPLETENESS (WORKING+TEST)   (%) : 87.2
REMARK   3    NUMBER OF REFLECTIONS             : 129143
REMARK   3
REMARK   3
REMARK   3   FIT TO DATA USED IN REFINEMENT.
REMARK   3    CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3    FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3    R VALUE            (WORKING SET) : 0.203
REMARK   3    FREE R VALUE                     : 0.247
REMARK   3    FREE R VALUE TEST SET SIZE   (%) : 10.000
REMARK   3    FREE R VALUE TEST SET COUNT      : 12828
REMARK   3    ESTIMATED ERROR OF FREE R VALUE  : 0.002
REMARK   3
REMARK   3   FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3    TOTAL NUMBER OF BINS USED           : 6
REMARK   3    BIN RESOLUTION RANGE HIGH       (A) : 1.80
REMARK   3    BIN RESOLUTION RANGE LOW        (A) : 1.91
REMARK   3    BIN COMPLETENESS (WORKING+TEST) (%) : 86.00
REMARK   3    REFLECTIONS IN BIN    (WORKING SET) : 18882
REMARK   3    BIN R VALUE           (WORKING SET) : 0.2830
REMARK   3    BIN FREE R VALUE                    : 0.3380
REMARK   3    BIN FREE R VALUE TEST SET SIZE  (%) : 10.10
REMARK   3    BIN FREE R VALUE TEST SET COUNT     : 2128
REMARK   3    ESTIMATED ERROR OF BIN FREE R VALUE : 0.007
REMARK   3
REMARK   3   NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3    PROTEIN ATOMS            : 13232
REMARK   3    NUCLEIC ACID ATOMS       : 0
REMARK   3    HETEROGEN ATOMS          : 28
REMARK   3    SOLVENT ATOMS            : 1016
REMARK   3
REMARK   3   B VALUES.
REMARK   3    FROM WILSON PLOT          (A**2) : 18.20
REMARK   3    MEAN B VALUE     (OVERALL, A**2) : 26.10
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REMARK   3    OVERALL ANISOTROPIC B VALUE.
REMARK   3     B11 (A**2) : 6.12000
REMARK   3     B22 (A**2) : -0.08000
REMARK   3     B33 (A**2) : -6.04000
REMARK   3     B12 (A**2) : 0.00000
REMARK   3     B13 (A**2) : 0.00000
REMARK   3     B23 (A**2) : 0.00000
REMARK   3
REMARK   3    ESTIMATED COORDINATE ERROR.
REMARK   3     ESD FROM LUZZATI PLOT        (A) : 0.23
REMARK   3     ESD FROM SIGMAA              (A) : 0.210
REMARK   3     LOW RESOLUTION CUTOFF        (A) : 5.00
REMARK   3
REMARK   3    CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3     ESD FROM C-V LUZZATI PLOT    (A) : 0.29
REMARK   3     ESD FROM C-V SIGMAA          (A) : 0.27
REMARK   3
REMARK   3    RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3     BOND LENGTHS                 (A) : 0.013
REMARK   3     BOND ANGLES           (DEGREES) : 1.60
REMARK   3     DIHEDRAL ANGLES       (DEGREES) : 22.80
REMARK   3     IMPROPER ANGLES       (DEGREES) : 1.13
REMARK   3
REMARK   3    ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3    ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS     SIGMA
REMARK   3     MAIN-CHAIN BOND           (A**2) : 1.23 ; 1.500
REMARK   3     MAIN-CHAIN ANGLE          (A**2) : 1.69 ; 2.000
REMARK   3     SIDE-CHAIN BOND           (A**2) : 1.87 ; 2.000
REMARK   3     SIDE-CHAIN ANGLE          (A**2) : 2.52 ; 2.500
REMARK   3
REMARK   3
REMARK   3    BULK SOLVENT MODELING.
REMARK   3     METHOD USED : FLAT MODEL
REMARK   3     KSOL        : 0.39
REMARK   3     BSOL        : 53.98
REMARK   3
REMARK   3    NCS MODEL : CONSTR
REMARK   3
REMARK   3    NCS RESTRAINTS.                         RMS    SIGMA/WEIGHT
REMARK   3     GROUP  1   POSITIONAL        (A) : NULL ; NULL
REMARK   3     GROUP  1   B-FACTOR       (A**2) : NULL ; NULL
REMARK   3
REMARK   3    PARAMETER FILE  1  : PROTEIN_REP.PARAM
REMARK   3    PARAMETER FILE  2  : ION.PARAM
REMARK   3    PARAMETER FILE  3  : WATER_REP.PARAM
REMARK   3    TOPOLOGY FILE  1   : PROTEIN.TOP
REMARK   3    TOPOLOGY FILE  2   : ION.TOP
REMARK   3    TOPOLOGY FILE  3   : WATER.TOP
REMARK   3
REMARK   3    OTHER REFINEMENT REMARKS: NULL
REMARK   4
REMARK   4 1F8M COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
REMARK   7
REMARK   7 SIDE CHAIN OF ACTIVE SITE CYS191 HAS BEEN
REMARK   7 PYRUVYLATED USING 3-BROMOPYRUVATE.
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 25-JUL-2000.
REMARK 100 THE RCSB ID CODE IS RCSB011377.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE               : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION       : 14-JUN-2000
REMARK 200  TEMPERATURE          (KELVIN) : 100.0
REMARK 200  PH                            : 8.00
REMARK 200  NUMBER OF CRYSTALS USED       : 1
REMARK 200
REMARK 200  SYNCHROTRON           (Y/N) : Y
REMARK 200  RADIATION SOURCE             : APS
REMARK 200  BEAMLINE                     : 19ID
REMARK 200  X-RAY GENERATOR MODEL        : NULL
REMARK 200  MONOCHROMATIC OR LAUE  (M/L) : M
REMARK 200  WAVELENGTH OR RANGE     (A) : 1.0089
REMARK 200  MONOCHROMATOR                : NULL
REMARK 200  OPTICS                       : NULL
REMARK 200
REMARK 200  DETECTOR TYPE                : CCD
REMARK 200  DETECTOR MANUFACTURER        : 3KX3K
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : DENZO
REMARK 200  DATA SCALING SOFTWARE        : SCALEPACK
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REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS    : 142726
REMARK 200  RESOLUTION RANGE HIGH      (A)  : 1.800
REMARK 200  RESOLUTION RANGE LOW       (A)  : 20.000
REMARK 200  REJECTION CRITERIA   (SIGMA(I)) : -3.000
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE     (%) : 96.3
REMARK 200  DATA REDUNDANCY                 : 4.840
REMARK 200  R MERGE                    (I) : 0.04600
REMARK 200  R SYM                      (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  : 14.8000
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 1.80
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE LOW  (A) : 1.86
REMARK 200  COMPLETENESS FOR SHELL     (%) : 94.1
REMARK 200  DATA REDUNDANCY IN SHELL       : 4.80
REMARK 200  R MERGE FOR SHELL          (I) : 0.27900
REMARK 200  R SYM FOR SHELL            (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR SHELL         : NULL
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: NULL
REMARK 200 SOFTWARE USED: AMORE
REMARK 200 STARTING MODEL: NULL
REMARK 200
REMARK 200 REMARK: NULL
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS    (%): NULL
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: PEG4000, SODIUM ACETATE,
REMARK 280  MAGNESIUM ACETATE, 3-BROMOPYRUVATE
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 21 21 21
REMARK 290
REMARK 290      SYMOP   SYMMETRY
REMARK 290      NNNMMM  OPERATOR
REMARK 290      1555    X,Y,Z
REMARK 290      2555    1/2-X,-Y,1/2+Z
REMARK 290      3555    -X,1/2+Y,1/2-Z
REMARK 290      4555    1/2+X,1/2-Y,-Z
REMARK 290
REMARK 290      WHERE NNN -> OPERATOR NUMBER
REMARK 290            MMM -> TRANSLATION VECTOR
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290    SMTRY1  1  1.000000  0.000000  0.000000     0.00000
REMARK 290    SMTRY2  1  0.000000  1.000000  0.000000     0.00000
REMARK 290    SMTRY3  1  0.000000  0.000000  1.000000     0.00000
REMARK 290    SMTRY1  2 -1.000000  0.000000  0.000000    37.15500
REMARK 290    SMTRY2  2  0.000000 -1.000000  0.000000     0.00000
REMARK 290    SMTRY3  2  0.000000  0.000000  1.000000    83.08250
REMARK 290    SMTRY1  3 -1.000000  0.000000  0.000000     0.00000
REMARK 290    SMTRY2  3  0.000000  1.000000  0.000000    64.51850
REMARK 290    SMTRY3  3  0.000000  0.000000 -1.000000    83.08250
REMARK 290    SMTRY1  4  1.000000  0.000000  0.000000    37.15500
REMARK 290    SMTRY2  4  0.000000 -1.000000  0.000000    64.51850
REMARK 290    SMTRY3  4  0.000000  0.000000 -1.000000     0.00000
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1
REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
REMARK 300 WHICH CONSISTS OF 4 CHAIN(S). SEE REMARK 350 FOR
REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
REMARK 350
REMARK 350 GENERATING THE BIOMOLECULE
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW.  BOTH NON-CRYSTALLOGRAPHIC AND
REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
REMARK 350
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REMARK 350 BIOMOLECULE: 1
REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B, C, D
REMARK 350   BIOMT1   1  1.000000  0.000000  0.000000        0.00000
REMARK 350   BIOMT2   1  0.000000  1.000000  0.000000        0.00000
REMARK 350   BIOMT3   1  0.000000  0.000000  1.000000        0.00000
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
REMARK 465
REMARK 465   M RES C SSSEQI
REMARK 465     MET A     0
REMARK 465     HIS A   428
REMARK 465     MET B     0
REMARK 465     HIS B   428
REMARK 465     MET C     0
REMARK 465     HIS C   428
REMARK 465     MET D     0
REMARK 465     HIS D   428
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500   M RES CSSEQI ATM1    RES CSSEQI ATM2    DEVIATION
REMARK 500     MET A 284   CE     MET A 284   SD     -0.094
REMARK 500     MET A 370   SD     MET A 370   CG      0.081
REMARK 500     PRO C 113   CG     PRO C 113   CB      0.087
REMARK 500     MET C 370   CE     MET C 370   SD     -0.099
REMARK 500     MET D  76   CE     MET D  76   SD     -0.086
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY .
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500   M RES CSSEQI ATM1    ATM2    ATM3
REMARK 500     THR A  19   N   -  CA  -  C    ANGL. DEV. =  9.8 DEGREES
REMARK 500     GLN A  39   N   -  CA  -  C    ANGL. DEV. = 11.5 DEGREES
REMARK 500     CYS A 191   N   -  CA  -  C    ANGL. DEV. =-10.7 DEGREES
REMARK 500     SER A 315   N   -  CA  -  C    ANGL. DEV. = 12.0 DEGREES.
REMARK 500     ASN A 319   N   -  CA  -  C    ANGL. DEV. =-13.1 DEGREES
REMARK 500     ALA A 417   N   -  CA  -  C    ANGL. DEV. = 13.4 DEGREES
REMARK 500     LEU B  90   CA  -  CB  -  CG   ANGL. DEV. = 10.9 DEGREES
REMARK 500     PRO B 107   N   -  CA  -  C    ANGL. DEV. =-11.7 DEGREES
REMARK 500     SER B 315   N   -  CA  -  C    ANGL. DEV. = 12.5 DEGREES
REMARK 500     ASN B 319   N   -  CA  -  C    ANGL. DEV. =-12.4 DEGREES
REMARK 500     LYS B 392   N   -  CA  -  C    ANGL. DEV. =-10.0 DEGREES
REMARK 500     ALA B 417   N   -  CA  -  C    ANGL. DEV. = 12.6 DEGREES
REMARK 500     LEU C  90   CA  -  CB  -  CG   ANGL. DEV. = 11.7 DEGREES
REMARK 500     PRO C 107   N   -  CA  -  C    ANGL. DEV. =-10.9 DEGREES
REMARK 500     CYS C 191   N   -  CA  -  C    ANGL. DEV. =-10.3 DEGREES
REMARK 500     PRO C 267   C   -  N   -  CA   ANGL. DEV. = -9.7 DEGREES
REMARK 500     SER C 315   N   -  CA  -  C    ANGL. DEV. =  9.9 DEGREES
REMARK 500     ASN C 319   N   -  CA  -  C    ANGL. DEV. =-10.8 DEGREES
REMARK 500     ALA C 417   N   -  CA  -  C    ANGL. DEV. = 13.4 DEGREES
REMARK 500     LEU D  90   CA  -  CB  -  CG   ANGL. DEV. = 10.6 DEGREES
REMARK 500     PRO D 107   N   -  CA  -  C    ANGL. DEV. =-11.1 DEGREES
REMARK 500     LEU D 147   CA  -  CB  -  CG   ANGL. DEV. =-11.1 DEGREES
REMARK 500     CYS D 191   N   -  CA  -  C    ANGL. DEV. =-11.6 DEGREES
REMARK 500     SER D 315   N   -  CA  -  C    ANGL. DEV. = 10.9 DEGREES
REMARK 500     ASN D 319   N   -  CA  -  C    ANGL. DEV. =-10.9 DEGREES
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REMARK 500      TRP D 320    N   -  CA  -   C    ANGL. DEV. = 11.0 DEGREES
REMARK 500      GLY D 398    N   -  CA  -   C    ANGL. DEV. = 10.8 DEGREES
REMARK 500      ALA D 417    N   -  CA  -   C    ANGL. DEV. = 13.9 DEGREES
REMARK 525
REMARK 525 SOLVENT
REMARK 525 THE FOLLOWING SOLVENT MOLECULES LIE FARTHER THAN EXPECTED
REMARK 525 FROM THE PROTEIN OR NUCLEIC ACID MOLECULE AND MAY BE
REMARK 525 ASSOCIATED WITH A SYMMETRY RELATED MOLECULE (M=MODEL
REMARK 525 NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE
REMARK 525 NUMBER; I=INSERTION CODE):
REMARK 525
REMARK 525   M RES CSSEQI
REMARK 525   0 HOH 1460        DISTANCE =  6.92 ANGSTROMS
REMARK 525   0 HOH 1602        DISTANCE =  8.73 ANGSTROMS
REMARK 900
REMARK 900 RELATED ENTRIES
REMARK 900 RELATED ID: 1F61    RELATED DB: PDB
REMARK 900 ICL APOENZYME STRUCTURE
REMARK 900 RELATED ID: 1F8I    RELATED DB: PDB
REMARK 900 STRUCTURE OF ICL WITH 3-NITROPROPIONATE AND GLYOXYLATE
REMARK 999
REMARK 999 SEQUENCE
REMARK 999 AN ALANINE WAS INSERTED AT THE N-TERMINUS
REMARK 999 AFTER THE FIRST METHIONINE RESIDUE, MASVV...
REMARK 999 MET 0 WAS NOT OBSERVED DUE TO POOR DENSITY OR
REMARK 999 PERHAPS IT WAS CLEAVED OFF THE RECOMBINANT
REMARK 999 PROTEIN DURING EXPRESSION. THEREFORE, THE
REMARK 999 FIRST RESIDUE IN THIS ENTRY IS ALA 1.
DBREF  1F8M A    0   428  GB      7436639   G70828           1    428
DBREF  1F8M B    0   428  GB      7436639   G70828           1    428
DBREF  1F8M C    0   428  GB      7436639   G70828           1    428
DBREF  1F8M D    0   428  GB      7436639   G70828           1    428
SEQADV 1F8M ALA A    1  GB   7436639                 INSERTION
SEQADV 1F8M ALA B    1  GB   7436639                 INSERTION
SEQADV 1F8M ALA C    1  GB   7436639                 INSERTION
SEQADV 1F8M ALA D    1  GB   7436639                 INSERTION
SEQRES    1 A  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES    2 A  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES    3 A  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES    4 A  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES    5 A  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES    6 A  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES    7 A  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES    8 A  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES    9 A  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES   10 A  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES   11 A  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES   12 A  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES   13 A  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES   14 A  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES   15 A  429  GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES   16 A  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES   17 A  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES   18 A  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES   19 A  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES   20 A  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES   21 A  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES   22 A  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES   23 A  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES   24 A  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES   25 A  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS HIS LEU
SEQRES   26 A  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES   27 A  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES   28 A  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES   29 A  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES   30 A  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES   31 A  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES   32 A  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES   33 A  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES    1 B  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES    2 B  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES    3 B  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES    4 B  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES    5 B  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES    6 B  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES    7 B  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES    8 B  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES    9 B  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES   10 B  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES   11 B  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
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SEQRES   12 B   429   VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES   13 B   429   ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES   14 B   429   LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES   15 B   429   GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES   16 B   429   GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES   17 B   429   THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES   18 B   429   VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES   19 B   429   ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES   20 B   429   PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES   21 B   429   ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES   22 B   429   LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES   23 B   429   THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES   24 B   429   GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES   25 B   429   TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES   26 B   429   ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES   27 B   429   ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES   28 B   429   PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES   29 B   429   GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES   30 B   429   GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES   31 B   429   ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES   32 B   429   ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES   33 B   429   THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES    1 C   429   MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES    2 C   429   ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES    3 C   429   VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES    4 C   429   GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES    5 C   429   GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES    6 C   429   TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES    7 C   429   VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES    8 C   429   SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES    9 C   429   HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES   10 C   429   VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES   11 C   429   ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES   12 C   429   VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES   13 C   429   ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES   14 C   429   LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES   15 C   429   GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES   16 C   429   GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES   17 C   429   THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES   18 C   429   VAL PRO THR VAL VAL ILE ALA ARG .THR ASP ALA GLU ALA
SEQRES   19 C   429   ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES   20 C   429   PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES   21 C   429   ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES   22 C   429   LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES   23 C   429   THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES   24 C   429   GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES   25 C   429   TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES   26 C   429   ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES   27 C   429   ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES   28 C   429   PHE HIS ALA LEU ASN TYR SER MET· PHE ASP LEU ALA TYR
SEQRES   29 C   429   GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES   30 C   429   GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES   31 C   429   ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES   32 C   429   ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES   33 C   429   THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES    1 D   429   MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES    2 D   429   ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES    3 D   429   VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES    4 D   429   GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES    5 D   429   GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES    6 D   429   TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES    7 D   429   VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES    8 D   429   SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES    9 D   429   HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES   10 D   429   VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES   11 D   429   ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES   12 D   429   VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES   13 D   429   ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES   14 D   429   LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES   15 D   429   GLU ASP GLN LEU ALA SER GLU LYS LYS CYS GLY HIS LEU
SEQRES   16 D   429   GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES   17 D   429   THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES   18 D   429   VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES   19 D   429   ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES   20 D   429   PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES   21 D   429   ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES   22 D   429   LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES   23 D   429   THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES   24 D   429   GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES   25 D   429   TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
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SEQRES  26 D  429    ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 D  429    ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 D  429    PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 D  429    GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 D  429    GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 D  429    ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 D  429    ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 D  429    THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
HET     MG  A 451         1
HET     MG  B 452         1
HET     MG  C 453         1
HET     MG  D 454         1
HET    PYR  A 500         6
HET    PYR  B 500         6
HET    PYR  C 500         6
HET    PYR  D 500         6
HETNAM      MG MAGNESIUM ION
HETNAM     PYR PYRUVIC ACID
FORMUL   5    MG    4(MG1 2+)
FORMUL   9   PYR    4(C3 H4 O3)
FORMUL  13   HOH    *1016(H2 O1)
HELIX    1   1 SER A    9  ASN A   20  1                                  12
HELIX    2   2 PRO A   21  LYS A   24  5                                   4
HELIX    3   3 SER A   31  GLN A   39  1                                   9
HELIX    4   4 HIS A   46  LEU A   63  1                                  18
HELIX    5   5 THR A   73  ALA A   83  1                                  11
HELIX    6   6 SER A   91  ALA A   99  1                                   9
HELIX    7   7 ASN A  115  GLY A  139  1                                  25
HELIX    8   8 GLY A  160  ALA A  174  1                                  15
HELIX    9   9 LEU A  185  LYS A  189  5                                   5
HELIX   10  10 PRO A  201  ALA A  219  1                                  19
HELIX   11  11 ASP A  245  PRO A  247  5                                   3
HELIX   12  12 GLY A  264  ALA A  276  1                                  13
HELIX   13  13 PRO A  277  ALA A  279  5                                   3
HELIX   14  14 ASP A  290  ALA A  303  1                                  14
HELIX   15  15 ASN A  319  LEU A  324  1                                   6
HELIX   16  16 ASP A  325  MET A  339  1                                  15
HELIX   17  17 LEU A  348  GLN A  369  1                                  22
HELIX   18  18 GLN A  369  GLU A  384  1                                  16
HELIX   19  19 GLU A  385  GLY A  387  5                                   3
HELIX   20  20 LYS A  392  VAL A  397  1                                   6
HELIX   21  21 GLY A  398  ASP A  410  1                                  13
HELIX   22  22 SER A  421  PHE A  427  1                                   7
HELIX   23  23 SER B    9  ASN B   20  1                                  12
HELIX   24  24 PRO B   21  LYS B   24  5                                   4
HELIX   25  25 SER B   31  GLN B   39  1                                   9
HELIX   26  26 HIS B   46  LEU B   63  1                                  18
HELIX   27  27 THR B   73  ALA B   83  1                                  11
HELIX   28  28 SER B   91  ALA B   99  1                                   9
HELIX   29  29 ASN B  115  GLY B  139  1                                  25
HELIX   30  30 GLY B  160  ALA B  174  1                                  15
HELIX   31  31 LEU B  185  LYS B  189  5                                   5
HELIX   32  32 PRO B  201  ALA B  219  1                                  19
HELIX   33  33 ASP B  245  PRO B  247  5                                   3
HELIX   34  34 GLY B  264  ALA B  276  1                                  13
HELIX   35  35 PRO B  277  ALA B  279  5                                   3
HELIX   36  36 ASP B  290  ALA B  303  1                                  14
HELIX   37  37 ASN B  319  LEU B  324  1                                   6
HELIX   38  38 ASP B  325  MET B  339  1                                  15
HELIX   39  39 LEU B  348  GLN B  369  1                                  22
HELIX   40  40 GLN B  369  GLU B  384  1                                  16
HELIX   41  41 GLU B  385  GLY B  387  5                                   3
HELIX   42  42 LYS B  392  VAL B  397  1                                   6
HELIX   43  43 GLY B  398  ASP B  410  1                                  13
HELIX   44  44 SER B  421  PHE B  427  1                                   7
HELIX   45  45 SER C    9  ASN C   20  1                                  12
HELIX   46  46 PRO C   21  LYS C   24  5                                   4
HELIX   47  47 SER C   31  LEU C   38  1                                   8
HELIX   48  48 HIS C   46  LEU C   63  1                                  18
HELIX   49  49 THR C   73  ALA C   83  1                                  11
HELIX   50  50 SER C   91  ALA C   99  1                                   9
HELIX   51  51 ASN C  115  GLY C  139  1                                  25
HELIX   52  52 GLY C  160  ALA C  174  1                                  15
HELIX   53  53 LEU C  185  LYS C  189  5                                   5
HELIX   54  54 PRO C  201  ALA C  219  1                                  19
HELIX   55  55 ASP C  245  PRO C  247  5                                   3
HELIX   56  56 GLY C  264  ALA C  276  1                                  13
HELIX   57  57 PRO C  277  ALA C  279  5                                   3
HELIX   58  58 ASP C  290  TYR C  305  1                                  16
HELIX   59  59 ASN C  319  LEU C  324  1                                   6
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HELIX   60  60 ASP C  325  MET C  339  1                                          15
HELIX   61  61 LEU C  348  GLN C  369  1                                          22
HELIX   62  62 GLN C  369  GLU C  384  1                                          16
HELIX   63  63 GLU C  385  GLY C  387  5                                           3
HELIX   64  64 LYS C  392  VAL C  397  1                                           6
HELIX   65  65 GLY C  398  ASP C  410  1                                          13
HELIX   66  66 SER C  421  PHE C  427  1                                           7
HELIX   67  67 SER D    9  ASN D   20  1                                          12
HELIX   68  68 PRO D   21  LYS D   24  5                                           4
HELIX   69  69 SER D   31  LEU D   38  1                                           8
HELIX   70  70 HIS D   46  LEU D   63  1                                          18
HELIX   71  71 THR D   73  ALA D   83  1                                          11
HELIX   72  72 SER D   91  ALA D   99  1                                           9
HELIX   73  73 ASN D  115  GLU D  138  1                                          24
HELIX   74  74 GLY D  160  ALA D  174  1                                          15
HELIX   75  75 LEU D  185  LYS D  189  5                                           5
HELIX   76  76 PRO D  201  ASP D  220  1                                          20
HELIX   77  77 ASP D  245  PRO D  247  5                                           3
HELIX   78  78 GLY D  264  ALA D  276  1                                          13
HELIX   79  79 PRO D  277  ALA D  279  5                                           3
HELIX   80  80 ASP D  290  ALA D  303  1                                          14
HELIX   81  81 ASN D  319  LEU D  324  1                                           6
HELIX   82  82 ASP D  325  GLY D  340  1                                          16
HELIX   83  83 LEU D  348  GLN D  369  1                                          22
HELIX   84  84 GLN D  369  ALA D  383  1                                          15
HELIX   85  85 GLU D  384  GLY D  387  5                                           4
HELIX   86  86 LYS D  392  VAL D  397  1                                           6
HELIX   87  87 GLY D  398  ASP D  410  1                                          13
HELIX   88  88 SER D  421  PHE D  427  1                                           7
SHEET    1  A 8 VAL A   66  LEU A   69  0
SHEET    2  A 8 PHE A  341  ILE A  346  1  O  LYS A 342   N  VAL A   66
SHEET    3  A 8 MET A  309  ASN A  313  1  O  LEU A 310   N  PHE A  343
SHEET    4  A 8 LEU A  281  MET A  284  1  O  ILE A 282   N  ALA A  311
SHEET    5  A 8 VAL A  224  THR A  229  1  O  VAL A 225   N  LEU A  281
SHEET    6  A 8 GLY A  178  GLU A  182  1  O  SER A 179   N  ILE A  226
SHEET    7  A 8 ILE A  150  ASP A  153  1  O  ILE A 150   N  GLY A  178
SHEET    8  A 8 ILE A   88  LEU A   90  1  O  ILE A  88   N  VAL A  151
SHEET    1  B 4 VAL A  198  LEU A  199  0
SHEET    2  B 4 LEU A  236  ILE A  237  1  O  LEU A 236   N  LEU A  199
SHEET    3  B 4 TYR A  259  THR A  261 -1  N  TYR A 259   O  ILE A  237
SHEET    4  B 4 ILE A  249  ARG A  253 -1  N  THR A 250   O  ARG A  260
SHEET    1  C 8 VAL B   66  LEU B   69  0
SHEET    2  C 8 PHE B  341  ILE B  346  1  O  LYS B 342   N  VAL B   66
SHEET    3  C 8 MET B  309  ASN B  313  1  O  LEU B 310   N  PHE B  343
SHEET    4  C 8 LEU B  281  MET B  284  1  O  ILE B 282   N  ALA B  311
SHEET    5  C 8 VAL B  224  THR B  229  1  O  VAL B 225   N  LEU B  281
SHEET    6  C 8 GLY B  178  GLU B  182  1  O  SER B 179   N  ILE B  226
SHEET    7  C 8 ILE B  150  ASP B  153  1  O  ILE B 150   N  GLY B  178
SHEET    8  C 8 ILE B   88  LEU B   90  1  O  ILE B  88   N  VAL B  151
SHEET    1  D 4 VAL B  198  LEU B  199  0
SHEET    2  D 4 LEU B  236  ILE B  237  1  O  LEU B 236   N  LEU B  199
SHEET    3  D 4 TYR B  259  THR B  261 -1  N  TYR B 259   O  ILE B  237
SHEET    4  D 4 ILE B  249  ARG B  253 -1  N  THR B 250   O  ARG B  260
SHEET    1  E 8 VAL C   66  LEU C   69  0
SHEET    2  E 8 PHE C  341  ILE C  346  1  O  LYS C 342   N  VAL C   66
SHEET    3  E 8 MET C  309  ASN C  313  1  O  LEU C 310   N  LYS C  342
SHEET    4  E 8 LEU C  281  MET C  284  1  O  ILE C 282   N  ALA C  311
SHEET    5  E 8 VAL C  224  THR C  229  1  O  VAL C 225   N  LEU C  281
SHEET    6  E 8 GLY C  178  GLU C  182  1  O  SER C 179   N  ILE C  226
SHEET    7  E 8 ILE C  150  ASP C  153  1  O  ILE C 150   N  GLY C  178
SHEET    8  E 8 ILE C   88  LEU C   90  1  O  ILE C  88   N  VAL C  151
SHEET    1  F 4 VAL C  198  LEU C  199  0
SHEET    2  F 4 LEU C  236  ILE C  237  1  O  LEU C 236   N  LEU C  199
SHEET    3  F 4 TYR C  259  THR C  261 -1  N  TYR C 259   O  ILE C  237
SHEET    4  F 4 ILE C  249  ARG C  253 -1  N  THR C 250   O  ARG C  260
SHEET    1  G 8 VAL D   66  LEU D   69  0
SHEET    2  G 8 PHE D  341  ILE D  346  1  O  LYS D 342   N  VAL D   66
SHEET    3  G 8 MET D  309  ASN D  313  1  O  LEU D 310   N  LYS D  342
SHEET    4  G 8 LEU D  281  MET D  284  1  O  ILE D 282   N  ALA D  311
SHEET    5  G 8 VAL D  224  THR D  229  1  O  VAL D 225   N  LEU D  281
SHEET    6  G 8 GLY D  178  GLU D  182  1  O  SER D 179   N  ILE D  226
SHEET    7  G 8 ILE D  150  ASP D  153  1  O  ILE D 150   N  GLY D  178
SHEET    8  G 8 ILE D   88  LEU D   90  1  O  ILE D  88   N  VAL D  151
SHEET    1  H 3 LEU D  236  ILE D  237  0
SHEET    2  H 3 TYR D  259  THR D  261 -1  N  TYR D 259   O  ILE D  237
SHEET    3  H 3 ILE D  249  ARG D  253 -1  N  THR D 250   O  ARG D  260
LINK         SG   CYS A 191              C3  PYR A 500
LINK         SG   CYS B 191              C3  PYR B 500
LINK         SG   CYS C 191              C3  PYR C 500
LINK         SG   CYS D 191              C3  PYR D 500
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CRYST1   74.310  129.037  166.165  90.00    90.00    90.00 P 21 21 21     16
ORIGX1       1.000000  0.000000  0.000000        0.00000
ORIGX2       0.000000  1.000000  0.000000        0.00000
ORIGX3       0.000000  0.000000  1.000000        0.00000
SCALE1       0.013457  0.000000  0.000000        0.00000
SCALE2       0.000000  0.007750  0.000000        0.00000
SCALE3       0.000000  0.000000  0.006018        0.00000
ATOM      1  N   ALA A   1      35.323  85.687  56.396  1.00 50.69           N
ATOM      2  CA  ALA A   1      36.135  84.474  56.073  1.00 50.34           C
ATOM      3  C   ALA A   1      36.929  83.952  57.287  1.00 50.04           C
ATOM      4  O   ALA A   1      37.221  84.697  58.234  1.00 49.92           O
ATOM      5  CB  ALA A   1      37.080  84.785  54.911  1.00 50.59           C
ATOM      6  N   SER A   2      37.275  82.664  57.246  1.00 49.19           N
ATOM      7  CA  SER A   2      38.010  81.991  58.328  1.00 47.87           C
ATOM      8  C   SER A   2      38.799  80.862  57.678  1.00 45.54           C
ATOM      9  O   SER A   2      38.690  80.658  56.470  1.00 46.49           O
ATOM     10  CB  SER A   2      37.009  81.421  59.364  1.00 49.30           C
ATOM     11  OG  SER A   2      37.640  80.733  60.443  1.00 50.44           O
ATOM     12  N   VAL A   3      39.584  80.125  58.460  1.00 42.96           N
ATOM     13  CA  VAL A   3      40.371  79.017  57.912  1.00 40.03           C
ATOM     14  C   VAL A   3      39.806  77.665  58.329  1.00 38.21           C
ATOM     15  O   VAL A   3      40.329  76.612  57.936  1.00 36.60           O
ATOM     16  CB  VAL A   3      41.850  79.061  58.395  1.00 40.47           C
ATOM     17  CG1 VAL A   3      42.286  80.515  58.581  1.00 41.82           C
ATOM     18  CG2 VAL A   3      42.010  78.283  59.700  1.00 40.79           C
ATOM     19  N   VAL A   4      38.763  77.704  59.153  1.00 36.08           N
ATOM     20  CA  VAL A   4      38.118  76.496  59.659  1.00 33.50           C
ATOM     21  C   VAL A   4      37.489  75.768  58.467  1.00 32.58           C
ATOM     22  O   VAL A   4      36.755  76.374  57.692  1.00 31.74           O
ATOM     23  CB  VAL A   4      37.007  76.853  60.682  1.00 34.26           C
ATOM     24  CG1 VAL A   4      36.426  75.569  61.293  1.00 32.26           C
ATOM     25  CG2 VAL A   4      37.555  77.800  61.756  1.00 31.21           C
ATOM     26  N   GLY A   5      37.803  74.481  58.322  1.00 32.99           N
ATOM     27  CA  GLY A   5      37.254  73.690  57.230  1.00 33.66           C
ATOM     28  C   GLY A   5      37.795  74.022  55.848  1.00 34.37           C
ATOM     29  O   GLY A   5      37.081  73.879  54.837  1.00 33.68           O
ATOM     30  N   THR A   6      39.052  74.471  55.794  1.00 33.45           N
ATOM     31  CA  THR A   6      39.682  74.815  54.523  1.00 32.52           C
ATOM     32  C   THR A   6      40.028  73.529  53.803  1.00 30.43           C
ATOM     33  O   THR A   6      40.683  72.660  54.356  1.00 29.38           O
ATOM     34  CB  THR A   6      40.964  75.648  54.741  1.00 34.26           C
ATOM     35  OG1 THR A   6      40.592  76.979  55.104  1.00 36.56           O
ATOM     36  CG2 THR A   6      41.804  75.690  53.479  1.00 33.57           C
ATOM     37  N   PRO A   7      39.570  73.388  52.553  1.00 31.14           N
ATOM     38  CA  PRO A   7      39.840  72.180  51.774  1.00 30.94           C
ATOM     39  C   PRO A   7      41.320  71.941  51.538  1.00 31.62           C
ATOM     40  O   PRO A   7      42.080  72.896  51.366  1.00 33.60           O
ATOM     41  CB  PRO A   7      39.053  72.416  50.477  1.00 29.92           C
ATOM     42  CG  PRO A   7      39.014  73.881  50.347  1.00 31.50           C
ATOM     43  CD  PRO A   7      38.806  74.375  51.768  1.00 31.95           C
ATOM     44  N   LYS A   8      41.724  70.675  51.577  1.00 31.42           N
ATOM     45  CA  LYS A   8      43.107  70.291  51.325  1.00 32.38           C
ATOM     46  C   LYS A   8      43.391  70.599  49.863  1.00 32.16           C
ATOM     47  O   LYS A   8      42.474  70.699  49.049  1.00 34.29           O
ATOM     48  CB  LYS A   8      43.300  68.794  51.536  1.00 32.30           C
ATOM     49  CG  LYS A   8      43.138  68.307  52.954  1.00 35.40           C
ATOM     50  CD  LYS A   8      43.189  66.789  52.983  1.00 36.01           C
ATOM     51  CE  LYS A   8      43.168  66.263  54.414  1.00 37.70           C
ATOM     52  NZ  LYS A   8      42.993  64.773  54.455  1.00 37.24           N
ATOM     53  N   SER A   9      44.656  70.744  49.510  1.00 32.25           N
ATOM     54  CA  SER A   9      45.013  71.014  48.126  1.00 30.76           C
ATOM     55  C   SER A   9      45.045  69.659  47.441  1.00 29.90           C
ATOM     56  O   SER A   9      45.138  68.624  48.097  1.00 30.29           O
ATOM     57  CB  SER A   9      46.416  71.611  48.044  1.00 31.70           C
ATOM     58  OG  SER A   9      47.349  70.602  48.413  1.00 32.17           O
ATOM     59  N   ALA A  10      44.963  69.673  46.120  1.00 30.06           N
ATOM     60  CA  ALA A  10      45.017  68.450  45.333  1.00 30.58           C
ATOM     61  C   ALA A  10      46.318  67.690  45.628  1.00 30.98           C
ATOM     62  O   ALA A  10      46.337  66.458  45.660  1.00 30.06           O
ATOM     63  CB  ALA A  10      44.927  68.803  43.846  1.00 29.61           C
ATOM     64  N   GLU A  11      47.411  68.425  45.861  1.00 32.10           N
ATOM     65  CA  GLU A  11      48.695  67.770  46.142  1.00 33.78           C
ATOM     66  C   GLU A  11      48.655  66.971  47.427  1.00 32.47           C
ATOM     67  O   GLU A  11      49.138  65.840  47.473  1.00 32.07           O
ATOM     68  CB  GLU A  11      49.838  68.790  46.232  1.00 37.30           C
ATOM     69  CG  GLU A  11      49.404  70.236  46.082  1.00 41.75           C
ATOM     70  CD  GLU A  11      48.903  70.548  44.685  1.00 43.53           C
ATOM     71  OE1 GLU A  11      49.623  70.253  43.722  1.00 44.00           O
ATOM     72  OE2 GLU A  11      47.789  71.101  44.546  1.00 47.42           O
ATOM     73  N   GLN A  12      48.096  67.564  48.482  1.00 32.75           N
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| ATOM | 74 | CA | GLN | A | 12 | 47.993 | 66.843 | 49.754 | 1.00 | 34.04 | C |
|------|----|----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 75 | C | GLN | A | 12 | 47.199 | 65.557 | 49.573 | 1.00 | 32.43 | C |
| ATOM | 76 | O | GLN | A | 12 | 47.550 | 64.525 | 50.125 | 1.00 | 31.50 | O |
| ATOM | 77 | CB | GLN | A | 12 | 47.296 | 67.687 | 50.817 | 1.00 | 35.53 | C |
| ATOM | 78 | CG | GLN | A | 12 | 47.908 | 69.039 | 51.049 | 1.00 | 37.73 | C |
| ATOM | 79 | CD | GLN | A | 12 | 47.145 | 69.831 | 52.097 | 1.00 | 40.26 | C |
| ATOM | 80 | OE1 | GLN | A | 12 | 46.889 | 69.348 | 53.207 | 1.00 | 41.27 | O |
| ATOM | 81 | NE2 | GLN | A | 12 | 46.778 | 71.050 | 51.752 | 1.00 | 39.99 | N |
| ATOM | 82 | N | ILE | A | 13 | 46.107 | 65.638 | 48.811 | 1.00 | 32.28 | N |
| ATOM | 83 | CA | ILE | A | 13 | 45.277 | 64.468 | 48.566 | 1.00 | 30.82 | C |
| ATOM | 84 | C | ILE | A | 13 | 46.053 | 63.415 | 47.782 | 1.00 | 30.51 | C |
| ATOM | 85 | O | ILE | A | 13 | 46.040 | 62.238 | 48.112 | 1.00 | 30.40 | O |
| ATOM | 86 | CB | ILE | A | 13 | 43.991 | 64.853 | 47.763 | 1.00 | 31.23 | C |
| ATOM | 87 | CG1 | ILE | A | 13 | 43.109 | 65.796 | 48.597 | 1.00 | 31.16 | C |
| ATOM | 88 | CG2 | ILE | A | 13 | 43.240 | 63.578 | 47.351 | 1.00 | 29.87 | C |
| ATOM | 89 | CD1 | ILE | A | 13 | 41.836 | 66.286 | 47.898 | 1.00 | 33.02 | C |
| ATOM | 90 | N | GLN | A | 14 | 46.726 | 63.846 | 46.721 | 1.00 | 32.83 | N |
| ATOM | 91 | CA | GLN | A | 14 | 47.491 | 62.904 | 45.909 | 1.00 | 33.74 | C |
| ATOM | 92 | C | GLN | A | 14 | 48.494 | 62.180 | 46.793 | 1.00 | 34.11 | C |
| ATOM | 93 | O | GLN | A | 14 | 48.625 | 60.962 | 46.731 | 1.00 | 33.17 | O |
| ATOM | 94 | CB | GLN | A | 14 | 48.222 | 63.625 | 44.772 | 1.00 | 34.39 | C |
| ATOM | 95 | CG | GLN | A | 14 | 48.918 | 62.662 | 43.809 | 1.00 | 34.57 | C |
| ATOM | 96 | CD | GLN | A | 14 | 47.923 | 61.804 | 43.044 | 1.00 | 34.84 | C |
| ATOM | 97 | OE1 | GLN | A | 14 | 47.138 | 62.324 | 42.266 | 1.00 | 36.57 | O |
| ATOM | 98 | NE2 | GLN | A | 14 | 47.946 | 60.494 | 43.274 | 1.00 | 33.04 | N |
| ATOM | 99 | N | GLN | A | 15 | 49.189 | 62.955 | 47.623 | 1.00 | 35.36 | N |
| ATOM | 100 | CA | GLN | A | 15 | 50.175 | 62.416 | 48.552 | 1.00 | 36.27 | C |
| ATOM | 101 | C | GLN | A | 15 | 49.616 | 61.269 | 49.392 | 1.00 | 35.96 | C |
| ATOM | 102 | O | GLN | A | 15 | 50.263 | 60.241 | 49.541 | 1.00 | 36.36 | O |
| ATOM | 103 | CB | GLN | A | 15 | 50.676 | 63.520 | 49.491 | 1.00 | 37.62 | C |
| ATOM | 104 | CG | GLN | A | 15 | 51.460 | 62.982 | 50.696 | 1.00 | 40.83 | C |
| ATOM | 105 | CD | GLN | A | 15 | 52.956 | 62.818 | 50.435 | 1.00 | 42.86 | C |
| ATOM | 106 | OE1 | GLN | A | 15 | 53.396 | 62.698 | 49.284 | 1.00 | 42.58 | O |
| ATOM | 107 | NE2 | GLN | A | 15 | 53.742 | 62.796 | 51.513 | 1.00 | 42.19 | N |
| ATOM | 108 | N | GLU | A | 16 | 48.421 | 61.450 | 49.955 | 1.00 | 36.28 | N |
| ATOM | 109 | CA | GLU | A | 16 | 47.805 | 60.402 | 50.757 | 1.00 | 36.45 | C |
| ATOM | 110 | C | GLU | A | 16 | 47.513 | 59.180 | 49.895 | 1.00 | 35.36 | C |
| ATOM | 111 | O | GLU | A | 16 | 47.787 | 58.048 | 50.291 | 1.00 | 35.53 | O |
| ATOM | 112 | CB | GLU | A | 16 | 46.495 | 60.896 | 51.380 | 1.00 | 38.43 | C |
| ATOM | 113 | CG | GLU | A | 16 | 46.647 | 62.025 | 52.373 | 1.00 | 42.59 | C |
| ATOM | 114 | CD | GLU | A | 16 | 45.298 | 62.574 | 52.834 | 1.00 | 44.66 | C |
| ATOM | 115 | OE1 | GLU | A | 16 | 44.474 | 61.780 | 53.355 | 1.00 | 47.47 | O |
| ATOM | 116 | OE2 | GLU | A | 16 | 45.058 | 63.793 | 52.675 | 1.00 | 45.28 | O |
| ATOM | 117 | N | TRP | A | 17 | 46.938 | 59.414 | 48.718 | 1.00 | 35.70 | N |
| ATOM | 118 | CA | TRP | A | 17 | 46.626 | 58.314 | 47.810 | 1.00 | 35.95 | C |
| ATOM | 119 | C | TRP | A | 17 | 47.927 | 57.609 | 47.469 | 1.00 | 36.26 | C |
| ATOM | 120 | O | TRP | A | 17 | 48.030 | 56.378 | 47.513 | 1.00 | 36.23 | O |
| ATOM | 121 | CB | TRP | A | 17 | 45.975 | 58.841 | 46.525 | 1.00 | 34.73 | C |
| ATOM | 122 | CG | TRP | A | 17 | 44.586 | 59.386 | 46.696 | 1.00 | 34.61 | C |
| ATOM | 123 | CD1 | TRP | A | 17 | 43.823 | 59.366 | 47.832 | 1.00 | 35.23 | C |
| ATOM | 124 | CD2 | TRP | A | 17 | 43.788 | 60.015 | 45.690 | 1.00 | 34.80 | C |
| ATOM | 125 | NE1 | TRP | A | 17 | 42.603 | 59.945 | 47.598 | 1.00 | 35.17 | N |
| ATOM | 126 | CE2 | TRP | A | 17 | 42.552 | 60.352 | 46.289 | 1.00 | 35.81 | C |
| ATOM | 127 | CE3 | TRP | A | 17 | 43.997 | 60.326 | 44.337 | 1.00 | 33.61 | C |
| ATOM | 128 | CZ2 | TRP | A | 17 | 41.529 | 60.985 | 45.582 | 1.00 | 34.68 | C |
| ATOM | 129 | CZ3 | TRP | A | 17 | 42.996 | 60.950 | 43.637 | 1.00 | 34.80 | C |
| ATOM | 130 | CH2 | TRP | A | 17 | 41.766 | 61.279 | 44.259 | 1.00 | 35.68 | C |
| ATOM | 131 | N | ASP | A | 18 | 48.937 | 58.410 | 47.163 | 1.00 | 37.48 | N |
| ATOM | 132 | CA | ASP | A | 18 | 50.235 | 57.858 | 46.813 | 1.00 | 38.68 | C |
| ATOM | 133 | C | ASP | A | 18 | 50.973 | 57.159 | 47.960 | 1.00 | 38.53 | C |
| ATOM | 134 | O | ASP | A | 18 | 51.698 | 56.207 | 47.714 | 1.00 | 38.87 | O |
| ATOM | 135 | CB | ASP | A | 18 | 51.149 | 58.955 | 46.255 | 1.00 | 39.66 | C |
| ATOM | 136 | CG | ASP | A | 18 | 50.746 | 59.424 | 44.862 | 1.00 | 41.51 | C |
| ATOM | 137 | OD1 | ASP | A | 18 | 50.148 | 58.631 | 44.105 | 1.00 | 43.13 | O |
| ATOM | 138 | OD2 | ASP | A | 18 | 51.045 | 60.597 | 44.527 | 1.00 | 41.22 | O |
| ATOM | 139 | N | THR | A | 19 | 50.782 | 57.598 | 49.206 | 1.00 | 38.08 | N |
| ATOM | 140 | CA | THR | A | 19 | 51.548 | 57.006 | 50.305 | 1.00 | 37.27 | C |
| ATOM | 141 | C | THR | A | 19 | 50.848 | 56.289 | 51.455 | 1.00 | 36.82 | C |
| ATOM | 142 | O | THR | A | 19 | 51.496 | 55.570 | 52.222 | 1.00 | 35.96 | O |
| ATOM | 143 | CB | THR | A | 19 | 52.545 | 58.064 | 50.897 | 1.00 | 37.14 | C |
| ATOM | 144 | OG1 | THR | A | 19 | 51.841 | 59.198 | 51.407 | 1.00 | 37.37 | O |
| ATOM | 145 | CG2 | THR | A | 19 | 53.479 | 58.555 | 49.820 | 1.00 | 37.80 | C |
| ATOM | 146 | N | ASN | A | 20 | 49.542 | 56.467 | 51.611 | 1.00 | 36.05 | N |
| ATOM | 147 | CA | ASN | A | 20 | 48.859 | 55.762 | 52.689 | 1.00 | 34.89 | C |
| ATOM | 148 | C | ASN | A | 20 | 48.523 | 54.350 | 52.195 | 1.00 | 34.33 | C |
| ATOM | 149 | O | ASN | A | 20 | 47.872 | 54.175 | 51.168 | 1.00 | 34.74 | O |
| ATOM | 150 | CB | ASN | A | 20 | 47.577 | 56.499 | 53.076 | 1.00 | 34.93 | C |
| ATOM | 151 | CG | ASN | A | 20 | 46.906 | 55.907 | 54.284 | 1.00 | 34.26 | C |
| ATOM | 152 | OD1 | ASN | A | 20 | 46.998 | 54.708 | 54.568 | 1.00 | 33.54 | O |
| ATOM | 153 | ND2 | ASN | A | 20 | 46.193 | 56.758 | 55.007 | 1.00 | 37.22 | N |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 154 | N | PRO | A | 21 | 48.982 | 53.325 | 52.918 | 1.00 | 34.40 | N |
| ATOM | 155 | CA | PRO | A | 21 | 48.736 | 51.933 | 52.559 | 1.00 | 34.61 | C |
| ATOM | 156 | C | PRO | A | 21 | 47.245 | 51.654 | 52.427 | 1.00 | 34.53 | C |
| ATOM | 157 | O | PRO | A | 21 | 46.850 | 50.653 | 51.816 | 1.00 | 34.68 | O |
| ATOM | 158 | CB | PRO | A | 21 | 49.357 | 51.166 | 53.727 | 1.00 | 34.81 | C |
| ATOM | 159 | CG | PRO | A | 21 | 50.450 | 52.031 | 54.146 | 1.00 | 33.84 | C |
| ATOM | 160 | CD | PRO | A | 21 | 49.798 | 53.385 | 54.140 | 1.00 | 34.89 | C |
| ATOM | 161 | N | ARG | A | 22 | 46.423 | 52.515 | 53.027 | 1.00 | 32.68 | N |
| ATOM | 162 | CA | ARG | A | 22 | 44.975 | 52.326 | 52.943 | 1.00 | 32.40 | C |
| ATOM | 163 | C | ARG | A | 22 | 44.521 | 52.294 | 51.485 | 1.00 | 31.67 | C |
| ATOM | 164 | O | ARG | A | 22 | 43.592 | 51.579 | 51.149 | 1.00 | 31.37 | O |
| ATOM | 165 | CB | ARG | A | 22 | 44.218 | 53.458 | 53.647 | 1.00 | 32.97 | C |
| ATOM | 166 | CG | ARG | A | 22 | 42.684 | 53.446 | 53.377 | 1.00 | 31.54 | C |
| ATOM | 167 | CD | ARG | A | 22 | 42.023 | 52.195 | 53.979 | 1.00 | 29.53 | C |
| ATOM | 168 | NE | ARG | A | 22 | 40.554 | 52.242 | 53.864 | 1.00 | 28.39 | N |
| ATOM | 169 | CZ | ARG | A | 22 | 39.888 | 52.049 | 52.730 | 1.00 | 29.26 | C |
| ATOM | 170 | NH1 | ARG | A | 22 | 40.558 | 51.793 | 51.625 | 1.00 | 27.13 | N |
| ATOM | 171 | NH2 | ARG | A | 22 | 38.551 | 52.103 | 52.696 | 1.00 | 27.99 | N |
| ATOM | 172 | N | TRP | A | 23 | 45.173 | 53.085 | 50.640 | 1.00 | 31.22 | N |
| ATOM | 173 | CA | TRP | A | 23 | 44.829 | 53.161 | 49.236 | 1.00 | 31.95 | C |
| ATOM | 174 | C | TRP | A | 23 | 45.714 | 52.295 | 48.353 | 1.00 | 33.82 | C |
| ATOM | 175 | O | TRP | A | 23 | 45.727 | 52.455 | 47.131 | 1.00 | 33.54 | O |
| ATOM | 176 | CB | TRP | A | 23 | 44.922 | 54.602 | 48.786 | 1.00 | 30.75 | C |
| ATOM | 177 | CG | TRP | A | 23 | 44.205 | 55.501 | 49.696 | 1.00 | 30.93 | C |
| ATOM | 178 | CD1 | TRP | A | 23 | 44.710 | 56.570 | 50.372 | 1.00 | 30.17 | C |
| ATOM | 179 | CD2 | TRP | A | 23 | 42.819 | 55.417 | 50.039 | 1.00 | 30.97 | C |
| ATOM | 180 | NE1 | TRP | A | 23 | 43.719 | 57.166 | 51.120 | 1.00 | 32.25 | N |
| ATOM | 181 | CE2 | TRP | A | 23 | 42.547 | 56.477 | 50.932 | 1.00 | 31.39 | C |
| ATOM | 182 | CE3 | TRP | A | 23 | 41.781 | 54.547 | 49.674 | 1.00 | 31.35 | C |
| ATOM | 183 | CZ2 | TRP | A | 23 | 41.270 | 56.696 | 51.472 | 1.00 | 30.96 | C |
| ATOM | 184 | CZ3 | TRP | A | 23 | 40.503 | 54.763 | 50.216 | 1.00 | 31.94 | C |
| ATOM | 185 | CH2 | TRP | A | 23 | 40.268 | 55.829 | 51.103 | 1.00 | 31.53 | C |
| ATOM | 186 | N | LYS | A | 24 | 46.424 | 51.361 | 48.975 | 1.00 | 36.83 | N |
| ATOM | 187 | CA | LYS | A | 24 | 47.332 | 50.483 | 48.250 | 1.00 | 38.10 | C |
| ATOM | 188 | C | LYS | A | 24 | 46.692 | 49.901 | 47.004 | 1.00 | 39.10 | C |
| ATOM | 189 | O | LYS | A | 24 | 47.157 | 50.153 | 45.891 | 1.00 | 40.14 | O |
| ATOM | 190 | CB | LYS | A | 24 | 47.824 | 49.345 | 49.149 | 1.00 | 39.75 | C |
| ATOM | 191 | CG | LYS | A | 24 | 48.914 | 48.490 | 48.518 | 1.00 | 42.34 | C |
| ATOM | 192 | CD | LYS | A | 24 | 49.223 | 47.241 | 49.340 | 1.00 | 44.96 | C |
| ATOM | 193 | CE | LYS | A | 24 | 47.963 | 46.401 | 49.539 | 1.00 | 45.22 | C |
| ATOM | 194 | NZ | LYS | A | 24 | 48.200 | 45.010 | 50.057 | 1.00 | 47.22 | N |
| ATOM | 195 | N | ASP | A | 25 | 45.612 | 49.147 | 47.169 | 1.00 | 38.62 | N |
| ATOM | 196 | CA | ASP | A | 25 | 44.982 | 48.520 | 46.010 | 1.00 | 38.66 | C |
| ATOM | 197 | C | ASP | A | 25 | 43.721 | 49.169 | 45.497 | 1.00 | 37.62 | C |
| ATOM | 198 | O | ASP | A | 25 | 42.836 | 48.470 | 44.996 | 1.00 | 38.81 | O |
| ATOM | 199 | CB | ASP | A | 25 | 44.688 | 47.077 | 46.347 | 1.00 | 40.75 | C |
| ATOM | 200 | CG | ASP | A | 25 | 45.876 | 46.402 | 46.935 | 1.00 | 42.73 | C |
| ATOM | 201 | OD1 | ASP | A | 25 | 46.909 | 46.382 | 46.238 | 1.00 | 44.02 | O |
| ATOM | 202 | OD2 | ASP | A | 25 | 45.779 | 45.914 | 48.085 | 1.00 | 43.93 | O |
| ATOM | 203 | N | VAL | A | 26 | 43.655 | 50.492 | 45.577 | 1.00 | 34.40 | N |
| ATOM | 204 | CA | VAL | A | 26 | 42.466 | 51.201 | 45.166 | 1.00 | 33.42 | C |
| ATOM | 205 | C | VAL | A | 26 | 42.652 | 51.995 | 43.908 | 1.00 | 31.61 | C |
| ATOM | 206 | O | VAL | A | 26 | 43.479 | 52.878 | 43.852 | 1.00 | 31.85 | O |
| ATOM | 207 | CB | VAL | A | 26 | 41.975 | 52.143 | 46.313 | 1.00 | 32.04 | C |
| ATOM | 208 | CG1 | VAL | A | 26 | 40.785 | 53.001 | 45.854 | 1.00 | 30.20 | C |
| ATOM | 209 | CG2 | VAL | A | 26 | 41.597 | 51.307 | 47.519 | 1.00 | 31.54 | C |
| ATOM | 210 | N | THR | A | 27 | 41.869 | 51.670 | 42.889 | 1.00 | 31.49 | N |
| ATOM | 211 | CA | THR | A | 27 | 41.934 | 52.387 | 41.628 | 1.00 | 30.98 | C |
| ATOM | 212 | C | THR | A | 27 | 40.874 | 53.496 | 41.622 | 1.00 | 31.21 | C |
| ATOM | 213 | O | THR | A | 27 | 39.701 | 53.257 | 41.968 | 1.00 | 29.16 | O |
| ATOM | 214 | CB | THR | A | 27 | 41.642 | 51.437 | 40.417 | 1.00 | 32.38 | C |
| ATOM | 215 | OG1 | THR | A | 27 | 42.700 | 50.485 | 40.261 | 1.00 | 34.63 | O |
| ATOM | 216 | CG2 | THR | A | 27 | 41.479 | 52.230 | 39.132 | 1.00 | 33.04 | C |
| ATOM | 217 | N | ARG | A | 28 | 41.300 | 54.699 | 41.259 | 1.00 | 29.85 | N |
| ATOM | 218 | CA | ARG | A | 28 | 40.398 | 55.841 | 41.125 | 1.00 | 30.35 | C |
| ATOM | 219 | C | ARG | A | 28 | 40.498 | 56.320 | 39.676 | 1.00 | 31.83 | C |
| ATOM | 220 | O | ARG | A | 28 | 41.559 | 56.788 | 39.235 | 1.00 | 31.17 | O |
| ATOM | 221 | CB | ARG | A | 28 | 40.792 | 57.010 | 42.039 | 1.00 | 30.52 | C |
| ATOM | 222 | CG | ARG | A | 28 | 40.661 | 56.736 | 43.533 | 1.00 | 29.21 | C |
| ATOM | 223 | CD | ARG | A | 28 | 40.896 | 58.030 | 44.270 | 1.00 | 30.52 | C |
| ATOM | 224 | NE | ARG | A | 28 | 40.464 | 58.013 | 45.662 | 1.00 | 29.84 | N |
| ATOM | 225 | CZ | ARG | A | 28 | 41.045 | 57.304 | 46.628 | 1.00 | 30.88 | C |
| ATOM | 226 | NH1 | ARG | A | 28 | 42.083 | 56.534 | 46.358 | 1.00 | 29.94 | N |
| ATOM | 227 | NH2 | ARG | A | 28 | 40.609 | 57.406 | 47.883 | 1.00 | 28.27 | N |
| ATOM | 228 | N | THR | A | 29 | 39.403 | 56.237 | 38.925 | 1.00 | 30.48 | N |
| ATOM | 229 | CA | THR | A | 29 | 39.455 | 56.687 | 37.549 | 1.00 | 30.60 | C |
| ATOM | 230 | C | THR | A | 29 | 39.299 | 58.196 | 37.388 | 1.00 | 30.79 | C |
| ATOM | 231 | O | THR | A | 29 | 39.236 | 58.703 | 36.268 | 1.00 | 32.42 | O |
| ATOM | 232 | CB | THR | A | 29 | 38.418 | 55.953 | 36.681 | 1.00 | 31.45 | C |
| ATOM | 233 | OG1 | THR | A | 29 | 37.097 | 56.187 | 37.198 | 1.00 | 30.30 | O |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 234 | CG2 | THR | A | 29 | 38.733 | 54.433 | 36.673 | 1.00 | 28.79 | C |
| ATOM | 235 | N | TYR | A | 30 | 39.231 | 58.924 | 38.496 | 1.00 | 29.94 | N |
| ATOM | 236 | CA | TYR | A | 30 | 39.140 | 60.378 | 38.433 | 1.00 | 29.05 | C |
| ATOM | 237 | C | TYR | A | 30 | 40.413 | 60.865 | 39.125 | 1.00 | 28.87 | C |
| ATOM | 238 | O | TYR | A | 30 | 41.135 | 60.056 | 39.707 | 1.00 | 26.80 | O |
| ATOM | 239 | CB | TYR | A | 30 | 37.893 | 60.900 | 39.154 | 1.00 | 29.70 | C |
| ATOM | 240 | CG | TYR | A | 30 | 37.621 | 60.230 | 40.471 | 1.00 | 29.74 | C |
| ATOM | 241 | CD1 | TYR | A | 30 | 38.273 | 60.642 | 41.639 | 1.00 | 29.85 | C |
| ATOM | 242 | CD2 | TYR | A | 30 | 36.724 | 59.167 | 40.561 | 1.00 | 29.51 | C |
| ATOM | 243 | CE1 | TYR | A | 30 | 38.031 | 60.012 | 42.869 | 1.00 | 27.87 | C |
| ATOM | 244 | CE2 | TYR | A | 30 | 36.485 | 58.519 | 41.794 | 1.00 | 29.11 | C |
| ATOM | 245 | CZ | TYR | A | 30 | 37.140 | 58.958 | 42.943 | 1.00 | 28.42 | C |
| ATOM | 246 | OH | TYR | A | 30 | 36.863 | 58.387 | 44.162 | 1.00 | 27.79 | O |
| ATOM | 247 | N | SER | A | 31 | 40.670 | 62.166 | 39.079 | 1.00 | 28.88 | N |
| ATOM | 248 | CA | SER | A | 31 | 41.901 | 62.710 | 39.666 | 1.00 | 28.88 | C |
| ATOM | 249 | C | SER | A | 31 | 41.678 | 63.482 | 40.949 | 1.00 | 30.06 | C |
| ATOM | 250 | O | SER | A | 31 | 40.554 | 63.913 | 41.233 | 1.00 | 31.02 | O |
| ATOM | 251 | CB | SER | A | 31 | 42.524 | 63.669 | 38.699 | 1.00 | 27.17 | C |
| ATOM | 252 | OG | SER | A | 31 | 41.668 | 64.785 | 38.594 | 1.00 | 30.36 | O |
| ATOM | 253 | N | ALA | A | 32 | 42.768 | 63.700 | 41.688 | 1.00 | 29.06 | N |
| ATOM | 254 | CA | ALA | A | 32 | 42.715 | 64.465 | 42.931 | 1.00 | 29.83 | C |
| ATOM | 255 | C | ALA | A | 32 | 42.132 | 65.833 | 42.639 | 1.00 | 30.34 | C |
| ATOM | 256 | O | ALA | A | 32 | 41.351 | 66.354 | 43.438 | 1.00 | 31.65 | O |
| ATOM | 257 | CB | ALA | A | 32 | 44.137 | 64.615 | 43.544 | 1.00 | 30.49 | C |
| ATOM | 258 | N | GLU | A | 33 | 42.504 | 66.442 | 41.507 | 1.00 | 29.57 | N |
| ATOM | 259 | CA | GLU | A | 33 | 41.952 | 67.756 | 41.186 | 1.00 | 29.57 | C |
| ATOM | 260 | C | GLU | A | 33 | 40.431 | 67.691 | 40.957 | 1.00 | 29.82 | C |
| ATOM | 261 | O | GLU | A | 33 | 39.715 | 68.684 | 41.197 | 1.00 | 31.74 | O |
| ATOM | 262 | CB | GLU | A | 33 | 42.609 | 68.369 | 39.933 | 1.00 | 33.38 | C |
| ATOM | 263 | CG | GLU | A | 33 | 44.068 | 68.795 | 40.076 | 1.00 | 36.04 | C |
| ATOM | 264 | CD | GLU | A | 33 | 45.028 | 67.636 | 39.879 | 1.00 | 40.71 | C |
| ATOM | 265 | OE1 | GLU | A | 33 | 44.556 | 66.510 | 39.601 | 1.00 | 42.08 | O |
| ATOM | 266 | OE2 | GLU | A | 33 | 46.261 | 67.849 | 39.997 | 1.00 | 43.29 | O |
| ATOM | 267 | N | ASP | A | 34 | 39.937 | 66.552 | 40.480 | 1.00 | 28.71 | N |
| ATOM | 268 | CA | ASP | A | 34 | 38.496 | 66.423 | 40.233 | 1.00 | 28.85 | C |
| ATOM | 269 | C | ASP | A | 34 | 37.759 | 66.507 | 41.572 | 1.00 | 27.97 | C |
| ATOM | 270 | O | ASP | A | 34 | 36.685 | 67.124 | 41.673 | 1.00 | 28.29 | O |
| ATOM | 271 | CB | ASP | A | 34 | 38.184 | 65.101 | 39.507 | 1.00 | 30.17 | C |
| ATOM | 272 | CG | ASP | A | 34 | 38.612 | 65.138 | 38.039 | 1.00 | 29.73 | C |
| ATOM | 273 | OD1 | ASP | A | 34 | 38.588 | 66.260 | 37.470 | 1.00 | 29.34 | O |
| ATOM | 274 | OD2 | ASP | A | 34 | 38.952 | 64.078 | 37.472 | 1.00 | 27.95 | O |
| ATOM | 275 | N | VAL | A | 35 | 38.367 | 65.909 | 42.594 | 1.00 | 27.50 | N |
| ATOM | 276 | CA | VAL | A | 35 | 37.817 | 65.914 | 43.954 | 1.00 | 25.65 | C |
| ATOM | 277 | C | VAL | A | 35 | 37.727 | 67.353 | 44.471 | 1.00 | 26.83 | C |
| ATOM | 278 | O | VAL | A | 35 | 36.639 | 67.836 | 44.857 | 1.00 | 25.65 | O |
| ATOM | 279 | CB | VAL | A | 35 | 38.700 | 65.038 | 44.885 | 1.00 | 24.18 | C |
| ATOM | 280 | CG1 | VAL | A | 35 | 38.126 | 64.999 | 46.305 | 1.00 | 24.09 | C |
| ATOM | 281 | CG2 | VAL | A | 35 | 38.790 | 63.612 | 44.330 | 1.00 | 25.67 | C |
| ATOM | 282 | N | VAL | A | 36 | 38.849 | 68.079 | 44.420 | 1.00 | 24.86 | N |
| ATOM | 283 | CA | VAL | A | 36 | 38.860 | 69.447 | 44.897 | 1.00 | 25.54 | C |
| ATOM | 284 | C | VAL | A | 36 | 37.825 | 70.338 | 44.203 | 1.00 | 25.50 | C |
| ATOM | 285 | O | VAL | A | 36 | 37.263 | 71.254 | 44.809 | 1.00 | 26.98 | O |
| ATOM | 286 | CB | VAL | A | 36 | 40.246 | 70.134 | 44.667 | 1.00 | 27.01 | C |
| ATOM | 287 | CG1 | VAL | A | 36 | 40.161 | 71.597 | 45.112 | 1.00 | 25.93 | C |
| ATOM | 288 | CG2 | VAL | A | 36 | 41.332 | 69.397 | 45.418 | 1.00 | 23.26 | C |
| ATOM | 289 | N | ALA | A | 37 | 37.628 | 70.106 | 42.909 | 1.00 | 25.20 | N |
| ATOM | 290 | CA | ALA | A | 37 | 36.690 | 70.896 | 42.129 | 1.00 | 24.90 | C |
| ATOM | 291 | C | ALA | A | 37 | 35.273 | 70.866 | 42.716 | 1.00 | 23.97 | C |
| ATOM | 292 | O | ALA | A | 37 | 34.524 | 71.855 | 42.671 | 1.00 | 26.41 | O |
| ATOM | 293 | CB | ALA | A | 37 | 36.666 | 70.359 | 40.690 | 1.00 | 25.41 | C |
| ATOM | 294 | N | LEU | A | 38 | 34.930 | 69.732 | 43.290 | 1.00 | 24.64 | N |
| ATOM | 295 | CA | LEU | A | 38 | 33.592 | 69.534 | 43.843 | 1.00 | 25.83 | C |
| ATOM | 296 | C | LEU | A | 38 | 33.383 | 69.963 | 45.296 | 1.00 | 26.28 | C |
| ATOM | 297 | O | LEU | A | 38 | 32.243 | 69.991 | 45.776 | 1.00 | 27.60 | O |
| ATOM | 298 | CB | LEU | A | 38 | 33.221 | 68.061 | 43.660 | 1.00 | 24.07 | C |
| ATOM | 299 | CG | LEU | A | 38 | 33.183 | 67.592 | 42.194 | 1.00 | 23.09 | C |
| ATOM | 300 | CD1 | LEU | A | 38 | 33.225 | 66.087 | 42.109 | 1.00 | 21.53 | C |
| ATOM | 301 | CD2 | LEU | A | 38 | 31.965 | 68.179 | 41.465 | 1.00 | 23.04 | C |
| ATOM | 302 | N | GLN | A | 39 | 34.457 | 70.367 | 45.974 | 1.00 | 27.07 | N |
| ATOM | 303 | CA | GLN | A | 39 | 34.385 | 70.740 | 47.394 | 1.00 | 26.40 | C |
| ATOM | 304 | C | GLN | A | 39 | 34.005 | 72.120 | 47.853 | 1.00 | 26.12 | C |
| ATOM | 305 | O | GLN | A | 39 | 33.907 | 72.356 | 49.053 | 1.00 | 26.81 | O |
| ATOM | 306 | CB | GLN | A | 39 | 35.698 | 70.380 | 48.072 | 1.00 | 25.38 | C |
| ATOM | 307 | CG | GLN | A | 39 | 35.988 | 68.915 | 47.996 | 1.00 | 26.79 | C |
| ATOM | 308 | CD | GLN | A | 39 | 37.319 | 68.529 | 48.618 | 1.00 | 29.80 | C |
| ATOM | 309 | OE1 | GLN | A | 39 | 38.359 | 69.180 | 48.357 | 1.00 | 31.39 | O |
| ATOM | 310 | NE2 | GLN | A | 39 | 37.309 | 67.452 | 49.434 | 1.00 | 25.47 | N |
| ATOM | 311 | N | GLY | A | 40 | 33.784 | 73.044 | 46.942 | 1.00 | 26.27 | N |
| ATOM | 312 | CA | GLY | A | 40 | 33.447 | 74.379 | 47.376 | 1.00 | 28.72 | C |
| ATOM | 313 | C | GLY | A | 40 | 34.608 | 74.939 | 48.182 | 1.00 | 28.91 | C |

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ATOM    314  O    GLY A  40      35.733  74.444  48.075  1.00 30.45           O
ATOM    315  N    SER A  41      34.350  75.938  49.012  1.00 29.29           N
ATOM    316  CA   SER A  41      35.454  76.519  49.775  1.00 29.55           C
ATOM    317  C    SER A  41      35.529  76.103  51.233  1.00 30.14           C
ATOM    318  O    SER A  41      36.390  76.592  51.968  1.00 30.14           O
ATOM    319  CB   SER A  41      35.437  78.043  49.629  1.00 29.53           C
ATOM    320  OG   SER A  41      34.204  78.616  50.026  1.00 32.78           O
ATOM    321  N    VAL A  42      34.662  75.170  51.646  1.00 29.15           N
ATOM    322  CA   VAL A  42      34.617  74.660  53.027  1.00 28.69           C
ATOM    323  C    VAL A  42      34.265  73.169  53.036  1.00 28.54           C
ATOM    324  O    VAL A  42      33.281  72.775  52.409  1.00 29.76           O
ATOM    325  CB   VAL A  42      33.533  75.388  53.853  1.00 29.08           C
ATOM    326  CG1  VAL A  42      33.528  74.872  55.283  1.00 30.82           C
ATOM    327  CG2  VAL A  42      33.789  76.900  53.865  1.00 31.68           C
ATOM    328  N    VAL A  43      35.063  72.349  53.722  1.00 26.94           N
ATOM    329  CA   VAL A  43      34.824  70.908  53.832  1.00 26.09           C
ATOM    330  C    VAL A  43      34.475  70.516  55.268  1.00 25.66           C
ATOM    331  O    VAL A  43      35.297  70.622  56.174  1.00 25.50           O
ATOM    332  CB   VAL A  43      36.066  70.085  53.397  1.00 26.38           C
ATOM    333  CG1  VAL A  43      35.864  68.598  53.711  1.00 24.72           C
ATOM    334  CG2  VAL A  43      36.315  70.282  51.886  1.00 25.53           C
ATOM    335  N    GLU A  44      33.259  70.024  55.482  1.00 25.58           N
ATOM    336  CA   GLU A  44      32.843  69.630  56.831  1.00 24.52           C
ATOM    337  C    GLU A  44      33.642  68.417  57.318  1.00 24.36           C
ATOM    338  O    GLU A  44      33.969  67.515  56.552  1.00 25.77           O
ATOM    339  CB   GLU A  44      31.314  69.306  56.849  1.00 22.85           C
ATOM    340  CG   GLU A  44      30.404  70.552  56.648  1.00 21.55           C
ATOM    341  CD   GLU A  44      28.908  70.194  56.750  1.00 23.31           C
ATOM    342  OE1  GLU A  44      28.354  69.645  55.768  1.00 23.51           O
ATOM    343  OE2  GLU A  44      28.300  70.420  57.822  1.00 21.45           O
ATOM    344  N    GLU A  45      33.968  68.395  58.602  1.00 23.41           N
ATOM    345  CA   GLU A  45      34.686  67.255  59.165  1.00 23.68           C
ATOM    346  C    GLU A  45      33.590  66.275  59.580  1.00 24.42           C
ATOM    347  O    GLU A  45      32.574  66.702  60.128  1.00 24.84           O
ATOM    348  CB   GLU A  45      35.468  67.700  60.411  1.00 25.82           C
ATOM    349  CG   GLU A  45      36.032  66.578  61.268  1.00 27.18           C
ATOM    350  CD   GLU A  45      37.027  65.734  60.517  1.00 31.33           C
ATOM    351  OE1  GLU A  45      37.454  66.172  59.429  1.00 35.02           O
ATOM    352  OE2  GLU A  45      37.386  64.643  60.999  1.00 32.57           O
ATOM    353  N    HIS A  46      33.788  64.992  59.300  1.00 24.05           N
ATOM    354  CA   HIS A  46      32.845  63.942  59.687  1.00 23.70           C
ATOM    355  C    HIS A  46      33.587  63.006  60.627  1.00 22.62           C
ATOM    356  O    HIS A  46      34.022  61.899  60.267  1.00 24.07           O
ATOM    357  CB   HIS A  46      32.311  63.167  58.460  1.00 22.87           C
ATOM    358  CG   HIS A  46      31.625  64.049  57.472  1.00 23.00           C
ATOM    359  ND1  HIS A  46      30.445  64.697  57.759  1.00 21.60           N
ATOM    360  CD2  HIS A  46      31.981  64.446  56.225  1.00 22.05           C
ATOM    361  CE1  HIS A  46      30.097  65.452  56.731  1.00 22.43           C
ATOM    362  NE2  HIS A  46      31.012  65.317  55.786  1.00 23.15           N
ATOM    363  N    THR A  47      33.706  63.465  61.867  1.00 22.19           N
ATOM    364  CA   THR A  47      34.415  62.724  62.870  1.00 20.43           C
ATOM    365  C    THR A  47      34.033  61.264  62.961  1.00 21.37           C
ATOM    366  O    THR A  47      34.900  60.405  62.819  1.00 20.37           O
ATOM    367  CB   THR A  47      34.257  63.413  64.270  1.00 20.25           C
ATOM    368  OG1  THR A  47      34.606  64.793  64.150  1.00 21.79           O
ATOM    369  CG2  THR A  47      35.142  62.760  65.330  1.00 22.69           C
ATOM    370  N    LEU A  48      32.746  60.947  63.149  1.00 19.39           N
ATOM    371  CA   LEU A  48      32.427  59.550  63.295  1.00 18.15           C
ATOM    372  C    LEU A  48      32.691  58.710  62.031  1.00 17.13           C
ATOM    373  O    LEU A  48      33.127  57.564  62.127  1.00 19.61           O
ATOM    374  CB   LEU A  48      30.974  59.364  63.818  1.00 19.26           C
ATOM    375  CG   LEU A  48      30.636  59.937  65.213  1.00 19.88           C
ATOM    376  CD1  LEU A  48      29.217  59.536  65.609  1.00 20.90           C
ATOM    377  CD2  LEU A  48      31.654  59.421  66.268  1.00 21.09           C
ATOM    378  N    ALA A  49      32.410  59.255  60.864  1.00 18.45           N
ATOM    379  CA   ALA A  49      32.661  58.527  59.615  1.00 18.91           C
ATOM    380  C    ALA A  49      34.172  58.214  59.522  1.00 21.51           C
ATOM    381  O    ALA A  49      34.571  57.101  59.142  1.00 23.28           O
ATOM    382  CB   ALA A  49      32.254  59.379  58.461  1.00 17.71           C
ATOM    383  N    ARG A  50      34.994  59.199  59.872  1.00 22.10           N
ATOM    384  CA   ARG A  50      36.451  59.025  59.801  1.00 24.46           C
ATOM    385  C    ARG A  50      36.921  58.000  60.804  1.00 23.69           C
ATOM    386  O    ARG A  50      37.585  57.033  60.472  1.00 25.35           O
ATOM    387  CB   ARG A  50      37.166  60.363  60.061  1.00 24.86           C
ATOM    388  CG   ARG A  50      38.705  60.274  59.896  1.00 26.30           C
ATOM    389  CD   ARG A  50      39.411  61.578  60.180  1.00 24.02           C
ATOM    390  NE   ARG A  50      38.865  62.719  59.440  1.00 26.13           N
ATOM    391  CZ   ARG A  50      38.903  62.853  58.116  1.00 22.75           C
ATOM    392  NH1  ARG A  50      39.463  61.916  57.378  1.00 26.31           N
ATOM    393  NH2  ARG A  50      38.407  63.933  57.539  1.00 25.45           N
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| ATOM | 394 | N | ARG A | 51 | 36.528 | 58.182 | 62.052 | 1.00 | 24.31 | N |
|------|-----|------|-------|----|--------|--------|--------|------|-------|---|
| ATOM | 395 | CA | ARG A | 51 | 36.964 | 57.274 | 63.091 | 1.00 | 24.35 | C |
| ATOM | 396 | C | ARG A | 51 | 36.432 | 55.879 | 62.867 | 1.00 | 23.55 | C |
| ATOM | 397 | O | ARG A | 51 | 37.133 | 54.908 | 63.102 | 1.00 | 22.26 | O |
| ATOM | 398 | CB | ARG A | 51 | 36.504 | 57.785 | 64.477 | 1.00 | 23.86 | C |
| ATOM | 399 | CG | ARG A | 51 | 37.015 | 56.974 | 65.640 | 1.00 | 26.88 | C |
| ATOM | 400 | CD | ARG A | 51 | 36.457 | 57.545 | 66.941 | 1.00 | 27.27 | C |
| ATOM | 401 | NE | ARG A | 51 | 37.083 | 57.021 | 68.159 | 1.00 | 29.32 | N |
| ATOM | 402 | CZ | ARG A | 51 | 36.821 | 55.853 | 68.737 | 1.00 | 30.33 | C |
| ATOM | 403 | NH1 | ARG A | 51 | 35.939 | 54.998 | 68.221 | 1.00 | 30.94 | N |
| ATOM | 404 | NH2 | ARG A | 51 | 37.400 | 55.563 | 69.901 | 1.00 | 32.78 | N |
| ATOM | 405 | N | GLY A | 52 | 35.173 | 55.768 | 62.437 | 1.00 | 21.27 | N |
| ATOM | 406 | CA | GLY A | 52 | 34.632 | 54.440 | 62.228 | 1.00 | 22.32 | C |
| ATOM | 407 | C | GLY A | 52 | 35.314 | 53.707 | 61.086 | 1.00 | 21.69 | C |
| ATOM | 408 | O | GLY A | 52 | 35.544 | 52.511 | 61.179 | 1.00 | 21.27 | O |
| ATOM | 409 | N | ALA A | 53 | 35.629 | 54.430 | 60.017 | 1.00 | 23.87 | N |
| ATOM | 410 | CA | ALA A | 53 | 36.281 | 53.841 | 58.849 | 1.00 | 23.58 | C |
| ATOM | 411 | C | ALA A | 53 | 37.696 | 53.409 | 59.220 | 1.00 | 24.80 | C |
| ATOM | 412 | O | ALA A | 53 | 38.138 | 52.330 | 58.816 | 1.00 | 23.32 | O |
| ATOM | 413 | CB | ALA A | 53 | 36.340 | 54.825 | 57.705 | 1.00 | 21.91 | C |
| ATOM | 414 | N | GLU A | 54 | 38.390 | 54.257 | 59.979 | 1.00 | 26.12 | N |
| ATOM | 415 | CA | GLU A | 54 | 39.762 | 53.955 | 60.416 | 1.00 | 26.53 | C |
| ATOM | 416 | C | GLU A | 54 | 39.785 | 52.727 | 61.299 | 1.00 | 25.84 | C |
| ATOM | 417 | O | GLU A | 54 | 40.582 | 51.814 | 61.072 | 1.00 | 25.68 | O |
| ATOM | 418 | CB | GLU A | 54 | 40.378 | 55.179 | 61.119 | 1.00 | 27.30 | C |
| ATOM | 419 | CG | GLU A | 54 | 40.875 | 56.230 | 60.122 | 1.00 | 27.84 | C |
| ATOM | 420 | CD | GLU A | 54 | 41.431 | 57.499 | 60.762 | 1.00 | 31.19 | C |
| ATOM | 421 | OE1 | GLU A | 54 | 41.657 | 57.523 | 61.990 | 1.00 | 33.97 | O |
| ATOM | 422 | OE2 | GLU A | 54 | 41.658 | 58.486 | 60.034 | 1.00 | 34.00 | O |
| ATOM | 423 | N | VAL A | 55 | 38.889 | 52.678 | 62.284 | 1.00 | 25.08 | N |
| ATOM | 424 | CA | VAL A | 55 | 38.789 | 51.536 | 63.180 | 1.00 | 24.86 | C |
| ATOM | 425 | C | VAL A | 55 | 38.374 | 50.277 | 62.427 | 1.00 | 25.21 | C |
| ATOM | 426 | O | VAL A | 55 | 38.859 | 49.170 | 62.720 | 1.00 | 24.59 | O |
| ATOM | 427 | CB | VAL A | 55 | 37.733 | 51.762 | 64.314 | 1.00 | 23.64 | C |
| ATOM | 428 | CG1 | VAL A | 55 | 37.543 | 50.475 | 65.124 | 1.00 | 25.06 | C |
| ATOM | 429 | CG2 | VAL A | 55 | 38.175 | 52.885 | 65.236 | 1.00 | 21.98 | C |
| ATOM | 430 | N | LEU A | 56 | 37.466 | 50.419 | 61.463 | 1.00 | 24.30 | N |
| ATOM | 431 | CA | LEU A | 56 | 37.018 | 49.239 | 60.730 | 1.00 | 24.05 | C |
| ATOM | 432 | C | LEU A | 56 | 38.157 | 48.624 | 59.902 | 1.00 | 24.18 | C |
| ATOM | 433 | O | LEU A | 56 | 38.382 | 47.419 | 59.911 | 1.00 | 26.02 | O |
| ATOM | 434 | CB | LEU A | 56 | 35.840 | 49.598 | 59.820 | 1.00 | 22.17 | C |
| ATOM | 435 | CG | LEU A | 56 | 35.252 | 48.476 | 58.963 | 1.00 | 22.03 | C |
| ATOM | 436 | CD1 | LEU A | 56 | 34.917 | 47.257 | 59.792 | 1.00 | 19.68 | C |
| ATOM | 437 | CD2 | LEU A | 56 | 34.031 | 49.039 | 58.205 | 1.00 | 22.93 | C |
| ATOM | 438 | N | TRP A | 57 | 38.877 | 49.457 | 59.190 | 1.00 | 25.69 | N |
| ATOM | 439 | CA | TRP A | 57 | 39.955 | 48.936 | 58.372 | 1.00 | 29.07 | C |
| ATOM | 440 | C | TRP A | 57 | 40.993 | 48.237 | 59.259 | 1.00 | 30.67 | C |
| ATOM | 441 | O | TRP A | 57 | 41.495 | 47.171 | 58.902 | 1.00 | 29.85 | O |
| ATOM | 442 | CB | TRP A | 57 | 40.585 | 50.072 | 57.587 | 1.00 | 29.98 | C |
| ATOM | 443 | CG | TRP A | 57 | 41.619 | 49.638 | 56.584 | 1.00 | 33.62 | C |
| ATOM | 444 | CD1 | TRP A | 57 | 42.968 | 49.813 | 56.679 | 1.00 | 35.64 | C |
| ATOM | 445 | CD2 | TRP A | 57 | 41.384 | 49.046 | 55.301 | 1.00 | 35.09 | C |
| ATOM | 446 | NE1 | TRP A | 57 | 43.590 | 49.382 | 55.533 | 1.00 | 35.88 | N |
| ATOM | 447 | CE2 | TRP A | 57 | 42.643 | 48.907 | 54.667 | 1.00 | 35.68 | C |
| ATOM | 448 | CE3 | TRP A | 57 | 40.232 | 48.623 | 54.620 | 1.00 | 35.92 | C |
| ATOM | 449 | CZ2 | TRP A | 57 | 42.786 | 48.365 | 53.379 | 1.00 | 35.70 | C |
| ATOM | 450 | CZ3 | TRP A | 57 | 40.374 | 48.077 | 53.332 | 1.00 | 35.62 | C |
| ATOM | 451 | CH2 | TRP A | 57 | 41.645 | 47.956 | 52.732 | 1.00 | 35.77 | C |
| ATOM | 452 | N | GLU A | 58 | 41.295 | 48.823 | 60.417 | 1.00 | 31.72 | N |
| ATOM | 453 | CA | GLU A | 58 | 42.259 | 48.208 | 61.316 | 1.00 | 33.87 | C |
| ATOM | 454 | C | GLU A | 58 | 41.802 | 46.857 | 61.795 | 1.00 | 33.95 | C |
| ATOM | 455 | O | GLU A | 58 | 42.563 | 45.879 | 61.732 | 1.00 | 34.77 | O |
| ATOM | 456 | CB | GLU A | 58 | 42.554 | 49.113 | 62.512 | 1.00 | 37.60 | C |
| ATOM | 457 | CG | GLU A | 58 | 43.628 | 50.123 | 62.220 | 1.00 | 42.99 | C |
| ATOM | 458 | CD | GLU A | 58 | 44.389 | 50.521 | 63.467 | 1.00 | 45.82 | C |
| ATOM | 459 | OE1 | GLU A | 58 | 44.913 | 49.615 | 64.161 | 1.00 | 46.10 | O |
| ATOM | 460 | OE2 | GLU A | 58 | 44.454 | 51.744 | 63.748 | 1.00 | 49.09 | O |
| ATOM | 461 | N | GLN A | 59 | 40.557 | 46.766 | 62.248 | 1.00 | 32.20 | N |
| ATOM | 462 | CA | GLN A | 59 | 40.073 | 45.486 | 62.741 | 1.00 | 32.23 | C |
| ATOM | 463 | C | GLN A | 59 | 40.072 | 44.416 | 61.662 | 1.00 | 31.88 | C |
| ATOM | 464 | O | GLN A | 59 | 40.341 | 43.245 | 61.941 | 1.00 | 31.98 | O |
| ATOM | 465 | CB | GLN A | 59 | 38.662 | 45.622 | 63.338 | 1.00 | 32.99 | C |
| ATOM | 466 | CG | GLN A | 59 | 38.549 | 46.662 | 64.444 | 1.00 | 33.53 | C |
| ATOM | 467 | CD | GLN A | 59 | 37.148 | 46.719 | 65.026 | 1.00 | 35.59 | C |
| ATOM | 468 | OE1 | GLN A | 59 | 36.162 | 46.376 | 64.341 | 1.00 | 35.58 | O |
| ATOM | 469 | NE2 | GLN A | 59 | 37.041 | 47.160 | 66.280 | 1.00 | 31.44 | N |
| ATOM | 470 | N | LEU A | 60 | 39.760 | 44.805 | 60.428 | 1.00 | 32.11 | N |
| ATOM | 471 | CA | LEU A | 60 | 39.729 | 43.830 | 59.338 | 1.00 | 32.12 | C |
| ATOM | 472 | C | LEU A | 60 | 41.117 | 43.207 | 59.128 | 1.00 | 34.27 | C |
| ATOM | 473 | O | LEU A | 60 | 41.230 | 42.063 | 58.694 | 1.00 | 32.13 | O |

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ATOM    474   CB   LEU A   60      39.235  44.476  58.045  1.00 30.36           C
ATOM    475   CG   LEU A   60      37.715  44.679  58.004  1.00 28.01           C
ATOM    476   CD1  LEU A   60      37.334  45.271  56.673  1.00 29.29           C
ATOM    477   CD2  LEU A   60      36.987  43.324  58.249  1.00 28.09           C
ATOM    478   N    HIS A   61      42.158  43.968  59.457  1.00 35.73           N
ATOM    479   CA   HIS A   61      43.529  43.479  59.330  1.00 38.87           C
ATOM    480   C    HIS A   61      44.095  42.886  60.644  1.00 39.86           C
ATOM    481   O    HIS A   61      44.984  42.027  60.604  1.00 39.70           O
ATOM    482   CB   HIS A   61      44.422  44.621  58.826  1.00 40.53           C
ATOM    483   CG   HIS A   61      44.152  45.014  57.405  1.00 42.52           C
ATOM    484   ND1  HIS A   61      44.579  44.264  56.330  1.00 44.26           N
ATOM    485   CD2  HIS A   61      43.498  46.079  56.879  1.00 43.23           C
ATOM    486   CE1  HIS A   61      44.206  44.851  55.204  1.00 43.88           C
ATOM    487   NE2  HIS A   61      43.548  45.954  55.509  1.00 44.29           N
ATOM    488   N    ASP A   62      43.564  43.313  61.796  1.00 40.15           N
ATOM    489   CA   ASP A   62      44.053  42.849  63.103  1.00 40.39           C
ATOM    490   C    ASP A   62      43.397  41.642  63.742  1.00 40.22           C
ATOM    491   O    ASP A   62      44.024  40.968  64.559  1.00 40.59           O
ATOM    492   CB   ASP A   62      44.005  43.973  64.138  1.00 41.14           C
ATOM    493   CG   ASP A   62      44.966  45.092  63.827  1.00 42.72           C
ATOM    494   OD1  ASP A   62      45.856  44.900  62.963  1.00 44.14           O
ATOM    495   OD2  ASP A   62      44.838  46.164  64.462  1.00 43.25           O
ATOM    496   N    LEU A   63      42.143  41.372  63.401  1.00 38.82           N
ATOM    497   CA   LEU A   63      41.426  40.242  63.987  1.00 37.37           C
ATOM    498   C    LEU A   63      41.328  39.059  63.027  1.00 36.82           C
ATOM    499   O    LEU A   63      41.466  39.227  61.811  1.00 36.69           O
ATOM    500   CB   LEU A   63      40.017  40.692  64.392  1.00 36.69           C
ATOM    501   CG   LEU A   63      39.992  41.933  65.291  1.00 37.43           C
ATOM    502   CD1  LEU A   63      38.562  42.385  65.573  1.00 36.97           C
ATOM    503   CD2  LEU A   63      40.699  41.601  66.610  1.00 37.53           C
ATOM    504   N    GLU A   64      41.096  37.870  63.579  1.00 36.79           N
ATOM    505   CA   GLU A   64      40.936  36.660  62.770  1.00 37.56           C
ATOM    506   C    GLU A   64      39.842  37.017  61.741  1.00 36.74           C
ATOM    507   O    GLU A   64      39.934  36.683  60.560  1.00 37.44           O
ATOM    508   CB   GLU A   64      40.495  35.484  63.655  1.00 38.88           C
ATOM    509   CG   GLU A   64      41.060  34.118  63.236  1.00 42.47           C
ATOM    510   CD   GLU A   64      40.470  32.949  64.042  1.00 45.02           C
ATOM    511   OE1  GLU A   64      40.441  33.028  65.297  1.00 45.35           O
ATOM    512   OE2  GLU A   64      40.036  31.944  63.425  1.00 46.34           O
ATOM    513   N    TRP A   65      38.798  37.696  62.204  1.00 35.10           N
ATOM    514   CA   TRP A   65      37.727  38.189  61.317  1.00 33.69           C
ATOM    515   C    TRP A   65      36.788  39.067  62.136  1.00 32.58           C
ATOM    516   O    TRP A   65      36.782  38.983  63.369  1.00 32.05           O
ATOM    517   CB   TRP A   65      36.958  37.050  60.640  1.00 32.31           C
ATOM    518   CG   TRP A   65      35.915  36.377  61.455  1.00 32.29           C
ATOM    519   CD1  TRP A   65      34.565  36.649  61.459  1.00 30.86           C
ATOM    520   CD2  TRP A   65      36.099  35.241  62.305  1.00 32.37           C
ATOM    521   NE1  TRP A   65      33.904  35.735  62.251  1.00 29.55           N
ATOM    522   CE2  TRP A   65      34.817  34.860  62.781  1.00 31.28           C
ATOM    523   CE3  TRP A   65      37.225  34.498  62.710  1.00 33.09           C
ATOM    524   CZ2  TRP A   65      34.625  33.768  63.638  1.00 33.27           C
ATOM    525   CZ3  TRP A   65      37.034  33.403  63.569  1.00 33.81           C
ATOM    526   CH2  TRP A   65      35.742  33.052  64.021  1.00 33.83           C
ATOM    527   N    VAL A   66      36.028  39.916  61.439  1.00 31.25           N
ATOM    528   CA   VAL A   66      35.089  40.855  62.071  1.00 29.72           C
ATOM    529   C    VAL A   66      33.682  40.372  61.776  1.00 28.76           C
ATOM    530   O    VAL A   66      33.348  40.166  60.620  1.00 30.08           O
ATOM    531   CB   VAL A   66      35.271  42.264  61.485  1.00 28.34           C
ATOM    532   CG1  VAL A   66      34.190  43.240  62.026  1.00 27.21           C
ATOM    533   CG2  VAL A   66      36.682  42.771  61.779  1.00 26.42           C
ATOM    534   N    ASN A   67      32.879  40.141  62.810  1.00 27.31           N
ATOM    535   CA   ASN A   67      31.499  39.716  62.596  1.00 26.92           C
ATOM    536   C    ASN A   67      30.548  40.740  63.210  1.00 26.50           C
ATOM    537   O    ASN A   67      30.960  41.627  63.962  1.00 26.05           O
ATOM    538   CB   ASN A   67      31.188  38.324  63.137  1.00 25.72           C
ATOM    539   CG   ASN A   67      31.544  38.151  64.594  1.00 29.06           C
ATOM    540   OD1  ASN A   67      31.843  39.109  65.310  1.00 30.14           O
ATOM    541   ND2  ASN A   67      31.493  36.902  65.050  1.00 29.44           N
ATOM    542   N    ALA A   68      29.277  40.615  62.879  1.00 24.98           N
ATOM    543   CA   ALA A   68      28.312  41.591  63.324  1.00 22.27           C
ATOM    544   C    ALA A   68      26.961  40.982  63.187  1.00 22.72           C
ATOM    545   O    ALA A   68      26.826  39.904  62.599  1.00 22.68           O
ATOM    546   CB   ALA A   68      28.404  42.819  62.445  1.00 22.94           C
ATOM    547   N    LEU A   69      25.968  41.716  63.697  1.00 21.45           N
ATOM    548   CA   LEU A   69      24.551  41.327  63.670  1.00 19.82           C
ATOM    549   C    LEU A   69      23.812  42.576  63.176  1.00 19.84           C
ATOM    550   O    LEU A   69      24.253  43.696  63.459  1.00 18.40           O
ATOM    551   CB   LEU A   69      24.065  40.975  65.073  1.00 18.35           C
ATOM    552   CG   LEU A   69      24.651  39.693  65.709  1.00 20.39           C
ATOM    553   CD1  LEU A   69      24.316  39.645  67.206  1.00 18.73           C
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ATOM    554  CD2 LEU A   69      24.114  38.433  64.930  1.00 16.50           C
ATOM    555  N   GLY A   70      22.719  42.383  62.438  1.00 20.86           N
ATOM    556  CA  GLY A   70      21.972  43.529  61.924  1.00 19.00           C
ATOM    557  C   GLY A   70      21.281  44.211  63.080  1.00 19.29           C
ATOM    558  O   GLY A   70      20.748  43.521  63.947  1.00 20.07           O
ATOM    559  N   ALA A   71      21.298  45.547  63.113  1.00 18.32           N
ATOM    560  CA  ALA A   71      20.637  46.312  64.170  1.00 16.50           C
ATOM    561  C   ALA A   71      19.691  47.323  63.513  1.00 16.67           C
ATOM    562  O   ALA A   71      20.091  48.017  62.585  1.00 16.78           O
ATOM    563  CB  ALA A   71      21.648  47.094  65.007  1.00 15.82           C
ATOM    564  N   LEU A   72      18.482  47.442  64.040  1.00 15.06           N
ATOM    565  CA  LEU A   72      17.540  48.381  63.466  1.00 16.15           C
ATOM    566  C   LEU A   72      17.134  49.439  64.470  1.00 17.45           C
ATOM    567  O   LEU A   72      16.376  50.334  64.095  1.00 14.44           O
ATOM    568  CB  LEU A   72      16.299  47.670  62.943  1.00 16.96           C
ATOM    569  CG  LEU A   72      15.433  46.968  63.973  1.00 16.39           C
ATOM    570  CD1 LEU A   72      14.003  47.552  63.950  1.00 15.25           C
ATOM    571  CD2 LEU A   72      15.377  45.467  63.601  1.00 16.05           C
ATOM    572  N   THR A   73      17.552  49.302  65.735  1.00 14.24           N
ATOM    573  CA  THR A   73      17.312  50.371  66.706  1.00 15.81           C
ATOM    574  C   THR A   73      18.650  50.698  67.398  1.00 15.94           C
ATOM    575  O   THR A   73      19.612  49.891  67.369  1.00 14.96           O
ATOM    576  CB  THR A   73      16.236  50.098  67.793  1.00 17.02           C
ATOM    577  OG1 THR A   73      16.790  49.358  68.902  1.00 16.59           O
ATOM    578  CG2 THR A   73      15.079  49.387  67.222  1.00 14.82           C
ATOM    579  N   GLY A   74      18.717  51.890  67.983  1.00 14.40           N
ATOM    580  CA  GLY A   74      19.938  52.298  68.659  1.00 16.33           C
ATOM    581  C   GLY A   74      20.251  51.366  69.825  1.00 17.44           C
ATOM    582  O   GLY A   74      21.410  50.917  69.999  1.00 18.71           O
ATOM    583  N   ASN A   75      19.241  51.090  70.637  1.00 14.44           N
ATOM    584  CA  ASN A   75      19.416  50.166  71.768  1.00 18.38           C
ATOM    585  C   ASN A   75      19.964  48.792  71.303  1.00 18.33           C
ATOM    586  O   ASN A   75      20.707  48.110  72.034  1.00 18.88           O
ATOM    587  CB  ASN A   75      18.067  49.963  72.473  1.00 17.94           C
ATOM    588  CG  ASN A   75      17.694  51.110  73.372  1.00 15.61           C
ATOM    589  OD1 ASN A   75      18.277  52.209  73.320  1.00 17.70           O
ATOM    590  ND2 ASN A   75      16.716  50.877  74.200  1.00 15.16           N
ATOM    591  N   MET A   76      19.582  48.364  70.109  1.00 18.73           N
ATOM    592  CA  MET A   76      20.077  47.075  69.626  1.00 19.94           C
ATOM    593  C   MET A   76      21.563  47.098  69.483  1.00 18.82           C
ATOM    594  O   MET A   76      22.244  46.157  69.902  1.00 19.98           O
ATOM    595  CB  MET A   76      19.479  46.724  68.264  1.00 19.89           C
ATOM    596  CG  MET A   76      18.272  45.909  68.383  1.00 19.20           C
ATOM    597  SD  MET A   76      17.822  45.351  66.742  1.00 18.57           S
ATOM    598  CE  MET A   76      16.189  44.907  67.109  1.00 16.57           C
ATOM    599  N   ALA A   77      22.057  48.158  68.867  1.00 18.10           N
ATOM    600  CA  ALA A   77      23.487  48.323  68.665  1.00 19.58           C
ATOM    601  C   ALA A   77      24.197  48.442  70.026  1.00 19.99           C
ATOM    602  O   ALA A   77      25.314  47.915  70.215  1.00 21.80           O
ATOM    603  CB  ALA A   77      23.763  49.561  67.811  1.00 17.43           C
ATOM    604  N   VAL A   78      23.569  49.131  70.985  1.00 19.72           N
ATOM    605  CA  VAL A   78      24.221  49.247  72.290  1.00 19.34           C
ATOM    606  C   VAL A   78      24.410  47.866  72.912  1.00 20.21           C
ATOM    607  O   VAL A   78      25.453  47.586  73.514  1.00 21.48           O
ATOM    608  CB  VAL A   78      23.422  50.128  73.270  1.00 18.07           C
ATOM    609  CG1 VAL A   78      24.081  50.034  74.699  1.00 17.28           C
ATOM    610  CG2 VAL A   78      23.407  51.620  72.764  1.00 16.12           C
ATOM    611  N   GLN A   79      23.415  47.010  72.802  1.00 19.74           N
ATOM    612  CA  GLN A   79      23.545  45.674  73.375  1.00 21.23           C
ATOM    613  C   GLN A   79      24.604  44.838  72.645  1.00 23.33           C
ATOM    614  O   GLN A   79      25.326  44.039  73.271  1.00 21.69           O
ATOM    615  CB  GLN A   79      22.217  44.934  73.348  1.00 21.76           C
ATOM    616  CG  GLN A   79      21.135  45.487  74.291  1.00 23.28           C
ATOM    617  CD  GLN A   79      21.630  45.681  75.719  1.00 25.72           C
ATOM    618  OE1 GLN A   79      22.338  44.840  76.257  1.00 25.31           O
ATOM    619  NE2 GLN A   79      21.242  46.786  76.338  1.00 25.55           N
ATOM    620  N   GLN A   80      24.706  45.011  71.332  1.00 21.56           N
ATOM    621  CA  GLN A   80      25.682  44.247  70.549  1.00 21.98           C
ATOM    622  C   GLN A   80      27.099  44.580  71.012  1.00 24.31           C
ATOM    623  O   GLN A   80      27.937  43.665  71.164  1.00 25.68           O
ATOM    624  CB  GLN A   80      25.510  44.548  69.054  1.00 19.50           C
ATOM    625  CG  GLN A   80      24.224  43.915  68.494  1.00 17.97           C
ATOM    626  CD  GLN A   80      23.816  44.478  67.142  1.00 16.45           C
ATOM    627  OE1 GLN A   80      24.498  45.319  66.572  1.00 14.00           O
ATOM    628  NE2 GLN A   80      22.703  44.002  66.630  1.00 15.29           N
ATOM    629  N   VAL A   81      27.357  45.869  71.247  1.00 23.79           N
ATOM    630  CA  VAL A   81      28.661  46.330  71.715  1.00 26.63           C
ATOM    631  C   VAL A   81      28.877  45.919  73.182  1.00 28.66           C
ATOM    632  O   VAL A   81      29.992  45.538  73.568  1.00 28.92           O
ATOM    633  CB  VAL A   81      28.795  47.856  71.588  1.00 25.86           C
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| ATOM | 634 | CG1 | VAL A | 81 | 30.090 | 48.347 | 72.235 | 1.00 25.04 | C |
|------|-----|-----|-------|----|--------|--------|--------|-----------|---|
| ATOM | 635 | CG2 | VAL A | 81 | 28.811 | 48.247 | 70.131 | 1.00 26.20 | C |
| ATOM | 636 | N | ARG A | 82 | 27.822 | 46.002 | 73.996 | 1.00 29.05 | N |
| ATOM | 637 | CA | ARG A | 82 | 27.920 | 45.621 | 75.409 | 1.00 28.87 | C |
| ATOM | 638 | C | ARG A | 82 | 28.304 | 44.137 | 75.498 | 1.00 29.37 | C |
| ATOM | 639 | O | ARG A | 82 | 29.122 | 43.735 | 76.337 | 1.00 27.06 | O |
| ATOM | 640 | CB | ARG A | 82 | 26.581 | 45.851 | 76.102 | 1.00 28.79 | C |
| ATOM | 641 | CG | ARG A | 82 | 26.409 | 45.170 | 77.476 | 1.00 27.90 | C |
| ATOM | 642 | CD | ARG A | 82 | 27.186 | 45.866 | 78.593 | 1.00 28.93 | C |
| ATOM | 643 | NE | ARG A | 82 | 26.633 | 47.180 | 78.911 | 1.00 26.12 | N |
| ATOM | 644 | CZ | ARG A | 82 | 27.246 | 48.065 | 79.688 | 1.00 28.07 | C |
| ATOM | 645 | NH1 | ARG A | 82 | 28.426 | 47.767 | 80.238 | 1.00 26.60 | N |
| ATOM | 646 | NH2 | ARG A | 82 | 26.717 | 49.267 | 79.869 | 1.00 23.28 | N |
| ATOM | 647 | N | ALA A | 83 | 27.718 | 43.329 | 74.618 | 1.00 27.70 | N |
| ATOM | 648 | CA | ALA A | 83 | 27.985 | 41.889 | 74.598 | 1.00 28.05 | C |
| ATOM | 649 | C | ALA A | 83 | 29.349 | 41.521 | 74.003 | 1.00 26.39 | C |
| ATOM | 650 | O | ALA A | 83 | 29.706 | 40.341 | 73.985 | 1.00 28.68 | O |
| ATOM | 651 | CB | ALA A | 83 | 26.864 | 41.147 | 73.852 | 1.00 26.93 | C |
| ATOM | 652 | N | GLY A | 84 | 30.097 | 42.501 | 73.514 | 1.00 26.53 | N |
| ATOM | 653 | CA | GLY A | 84 | 31.425 | 42.224 | 72.994 | 1.00 28.53 | C |
| ATOM | 654 | C | GLY A | 84 | 31.688 | 42.307 | 71.503 | 1.00 28.58 | C |
| ATOM | 655 | O | GLY A | 84 | 32.841 | 42.158 | 71.083 | 1.00 30.79 | O |
| ATOM | 656 | N | LEU A | 85 | 30.649 | 42.548 | 70.701 | 1.00 26.10 | N |
| ATOM | 657 | CA | LEU A | 85 | 30.822 | 42.639 | 69.250 | 1.00 25.03 | C |
| ATOM | 658 | C | LEU A | 85 | 31.610 | 43.887 | 68.880 | 1.00 24.61 | C |
| ATOM | 659 | O | LEU A | 85 | 31.565 | 44.888 | 69.597 | 1.00 24.98 | O |
| ATOM | 660 | CB | LEU A | 85 | 29.445 | 42.622 | 68.581 | 1.00 23.35 | C |
| ATOM | 661 | CG | LEU A | 85 | 28.697 | 41.322 | 68.848 | 1.00 21.82 | C |
| ATOM | 662 | CD1 | LEU A | 85 | 27.425 | 41.218 | 68.007 | 1.00 22.79 | C |
| ATOM | 663 | CD2 | LEU A | 85 | 29.603 | 40.179 | 68.471 | 1.00 26.12 | C |
| ATOM | 664 | N | LYS A | 86 | 32.349 | 43.855 | 67.780 | 1.00 22.98 | N |
| ATOM | 665 | CA | LYS A | 86 | 33.151 | 45.020 | 67.444 | 1.00 24.24 | C |
| ATOM | 666 | C | LYS A | 86 | 32.754 | 45.795 | 66.193 | 1.00 23.45 | C |
| ATOM | 667 | O | LYS A | 86 | 33.500 | 46.646 | 65.717 | 1.00 23.66 | O |
| ATOM | 668 | CB | LYS A | 86 | 34.639 | 44.618 | 67.370 | 1.00 26.89 | C |
| ATOM | 669 | CG | LYS A | 86 | 35.223 | 44.229 | 68.744 | 1.00 29.93 | C |
| ATOM | 670 | CD | LYS A | 86 | 36.664 | 43.705 | 68.638 | 1.00 33.00 | C |
| ATOM | 671 | CE | LYS A | 86 | 37.159 | 43.100 | 69.962 | 1.00 34.76 | C |
| ATOM | 672 | NZ | LYS A | 86 | 37.438 | 44.076 | 71.060 | 1.00 35.44 | N |
| ATOM | 673 | N | ALA A | 87 | 31.583 | 45.491 | 65.659 | 1.00 22.80 | N |
| ATOM | 674 | CA | ALA A | 87 | 31.060 | 46.177 | 64.483 | 1.00 21.82 | C |
| ATOM | 675 | C | ALA A | 87 | 29.538 | 45.978 | 64.498 | 1.00 20.00 | C |
| ATOM | 676 | O | ALA A | 87 | 29.032 | 45.061 | 65.129 | 1.00 21.92 | O |
| ATOM | 677 | CB | ALA A | 87 | 31.654 | 45.578 | 63.179 | 1.00 22.05 | C |
| ATOM | 678 | N | ILE A | 88 | 28.819 | 46.854 | 63.794 | 1.00 20.24 | N |
| ATOM | 679 | CA | ILE A | 88 | 27.370 | 46.768 | 63.730 | 1.00 19.33 | C |
| ATOM | 680 | C | ILE A | 88 | 26.968 | 46.685 | 62.256 | 1.00 18.78 | C |
| ATOM | 681 | O | ILE A | 88 | 27.510 | 47.390 | 61.430 | 1.00 19.43 | O |
| ATOM | 682 | CB | ILE A | 88 | 26.764 | 48.046 | 64.360 | 1.00 21.99 | C |
| ATOM | 683 | CG1 | ILE A | 88 | 27.274 | 48.169 | 65.800 | 1.00 21.54 | C |
| ATOM | 684 | CG2 | ILE A | 88 | 25.236 | 47.984 | 64.337 | 1.00 21.70 | C |
| ATOM | 685 | CD1 | ILE A | 88 | 27.420 | 49.533 | 66.269 | 1.00 25.57 | C |
| ATOM | 686 | N | TYR A | 89 | 26.005 | 45.839 | 61.937 | 1.00 19.30 | N |
| ATOM | 687 | CA | TYR A | 89 | 25.560 | 45.744 | 60.545 | 1.00 17.82 | C |
| ATOM | 688 | C | TYR A | 89 | 24.188 | 46.398 | 60.478 | 1.00 14.99 | C |
| ATOM | 689 | O | TYR A | 89 | 23.378 | 46.092 | 61.295 | 1.00 15.04 | O |
| ATOM | 690 | CB | TYR A | 89 | 25.414 | 44.290 | 60.124 | 1.00 15.99 | C |
| ATOM | 691 | CG | TYR A | 89 | 24.953 | 44.204 | 58.692 | 1.00 17.37 | C |
| ATOM | 692 | CD1 | TYR A | 89 | 25.777 | 44.626 | 57.656 | 1.00 19.79 | C |
| ATOM | 693 | CD2 | TYR A | 89 | 23.662 | 43.790 | 58.384 | 1.00 18.55 | C |
| ATOM | 694 | CE1 | TYR A | 89 | 25.324 | 44.653 | 56.314 | 1.00 19.98 | C |
| ATOM | 695 | CE2 | TYR A | 89 | 23.204 | 43.812 | 57.077 | 1.00 20.44 | C |
| ATOM | 696 | CZ | TYR A | 89 | 24.038 | 44.244 | 56.043 | 1.00 20.05 | C |
| ATOM | 697 | OH | TYR A | 89 | 23.565 | 44.257 | 54.742 | 1.00 21.90 | O |
| ATOM | 698 | N | LEU A | 90 | 23.960 | 47.250 | 59.482 | 1.00 13.65 | N |
| ATOM | 699 | CA | LEU A | 90 | 22.700 | 47.973 | 59.325 | 1.00 16.27 | C |
| ATOM | 700 | C | LEU A | 90 | 22.107 | 47.505 | 58.018 | 1.00 16.09 | C |
| ATOM | 701 | O | LEU A | 90 | 22.529 | 47.895 | 56.910 | 1.00 15.99 | O |
| ATOM | 702 | CB | LEU A | 90 | 22.992 | 49.469 | 59.311 | 1.00 18.34 | C |
| ATOM | 703 | CG | LEU A | 90 | 21.957 | 50.568 | 59.042 | 1.00 20.77 | C |
| ATOM | 704 | CD1 | LEU A | 90 | 20.540 | 50.025 | 59.009 | 1.00 18.71 | C |
| ATOM | 705 | CD2 | LEU A | 90 | 22.168 | 51.682 | 60.034 | 1.00 16.69 | C |
| ATOM | 706 | N | SER A | 91 | 21.124 | 46.650 | 58.197 | 1.00 17.21 | N |
| ATOM | 707 | CA | SER A | 91 | 20.405 | 45.990 | 57.120 | 1.00 17.25 | C |
| ATOM | 708 | C | SER A | 91 | 19.313 | 46.863 | 56.516 | 1.00 14.77 | C |
| ATOM | 709 | O | SER A | 91 | 18.513 | 47.444 | 57.261 | 1.00 14.88 | O |
| ATOM | 710 | CB | SER A | 91 | 19.791 | 44.718 | 57.700 | 1.00 16.62 | C |
| ATOM | 711 | OG | SER A | 91 | 18.927 | 44.115 | 56.773 | 1.00 19.19 | O |
| ATOM | 712 | N | GLY A | 92 | 19.270 | 46.915 | 55.185 | 1.00 14.24 | N |
| ATOM | 713 | CA | GLY A | 92 | 18.232 | 47.697 | 54.504 | 1.00 13.49 | C |

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ATOM    714   C    GLY A   92      16.938  46.899  54.542  1.00 15.16           C
ATOM    715   O    GLY A   92      15.842  47.476  54.478  1.00 13.82           O
ATOM    716   N    TRP A   93      17.043  45.572  54.644  1.00 12.27           N
ATOM    717   CA   TRP A   93      15.848  44.704  54.717  1.00 13.73           C
ATOM    718   C    TRP A   93      15.105  45.036  56.028  1.00 13.03           C
ATOM    719   O    TRP A   93      13.870  45.164  56.039  1.00 13.75           O
ATOM    720   CB   TRP A   93      16.288  43.217  54.748  1.00 13.20           C
ATOM    721   CG   TRP A   93      15.174  42.148  54.715  1.00 13.68           C
ATOM    722   CD1  TRP A   93      14.879  41.328  53.670  1.00 12.69           C
ATOM    723   CD2  TRP A   93      14.230  41.833  55.746  1.00 13.43           C
ATOM    724   NE1  TRP A   93      13.814  40.524  53.984  1.00 14.71           N
ATOM    725   CE2  TRP A   93      13.392  40.814  55.250  1.00 13.41           C
ATOM    726   CE3  TRP A   93      14.005  42.313  57.039  1.00 15.38           C
ATOM    727   CZ2  TRP A   93      12.364  40.279  55.989  1.00 11.78           C
ATOM    728   CZ3  TRP A   93      12.976  41.770  57.782  1.00 16.40           C
ATOM    729   CH2  TRP A   93      12.165  40.762  57.255  1.00 15.38           C
ATOM    730   N    GLN A   94      15.862  45.166  57.135  1.00 14.40           N
ATOM    731   CA   GLN A   94      15.297  45.479  58.454  1.00 13.90           C
ATOM    732   C    GLN A   94      14.666  46.876  58.466  1.00 14.73           C
ATOM    733   O    GLN A   94      13.590  47.074  59.054  1.00 13.96           O
ATOM    734   CB   GLN A   94      16.365  45.362  59.559  1.00 15.29           C
ATOM    735   CG   GLN A   94      16.808  43.900  59.792  1.00 17.79           C
ATOM    736   CD   GLN A   94      17.784  43.750  60.970  1.00 17.15           C
ATOM    737   OE1  GLN A   94      18.533  44.684  61.284  1.00 21.26           O
ATOM    738   NE2  GLN A   94      17.785  42.572  61.618  1.00 19.47           N
ATOM    739   N    VAL A   95      15.329  47.836  57.811  1.00 14.08           N
ATOM    740   CA   VAL A   95      14.800  49.196  57.686  1.00 13.82           C
ATOM    741   C    VAL A   95      13.473  49.140  56.883  1.00 13.03           C
ATOM    742   O    VAL A   95      12.494  49.772  57.260  1.00 13.70           O
ATOM    743   CB   VAL A   95      15.866  50.066  57.007  1.00 12.82           C
ATOM    744   CG1  VAL A   95      15.265  51.372  56.447  1.00 14.20           C
ATOM    745   CG2  VAL A · 95      16.996  50.318  58.023  1.00 12.73           C
ATOM    746   N    ALA A   96      13.437  48.364  55.796  1.00 12.98           N
ATOM    747   CA   ALA A   96      12.209  48.217  55.013  1.00 13.08           C
ATOM    748   C    ALA A   96      11.098  47.624  55.900  1.00 13.87           C
ATOM    749   O    ALA A   96       9.949  48.053  55.875  1.00 13.22           O
ATOM    750   CB   ALA A   96      12.463  47.276  53.816  1.00 12.89           C
ATOM    751   N    GLY A   97      11.451  46.618  56.676  1.00 13.78           N
ATOM    752   CA   GLY A   97      10.454  45.971  57.498  1.00 14.16           C
ATOM    753   C    GLY A   97       9.965  46.648  58.766  1.00 14.40           C
ATOM    754   O    GLY A   97       8.820  46.443  59.147  1.00 12.58           O
ATOM    755   N    ASP A   98      10.776  47.494  59.397  1.00 13.89           N
ATOM    756   CA   ASP A   98      10.333  48.064  60.681  1.00 13.81           C
ATOM    757   C,   ASP A   98      11.032  49.353  61.072  1.00 13.03           C
ATOM    758   O    ASP A   98      10.935  49.744  62.222  1.00 14.63           O
ATOM    759   CB   ASP A   98      10.623  46.996  61.773  1.00 14.40           C
ATOM    760   CG   ASP A   98       9.727  47.088  63.000  1.00 13.95           C
ATOM    761   OD1  ASP A   98       8.612  47.670  62.965  1.00 15.25           O
ATOM    762   OD2  ASP A   98      10.173  46.534  64.053  1.00 16.14           O
ATOM    763   N    ALA A   99      11.775  49.989  60.170  1.00 12.72           N
ATOM    764   CA   ALA A   99      12.465  51.229  60.591  1.00 13.43           C
ATOM    765   C    ALA A   99      12.741  52.219  59.463  1.00 14.01           C
ATOM    766   O    ALA A   99      13.863  52.715  59.318  1.00 15.31           O
ATOM    767   CB   ALA A   99      13.796  50.868  61.315  1.00 13.69           C
ATOM    768   N    ASN A  100      11.735  52.520  58.650  1.00  9.19           N
ATOM    769   CA   ASN A  100      11.991  53.445  57.577  1.00  8.48           C
ATOM    770   C    ASN A  100      11.145  54.714  57.650  1.00 10.85           C
ATOM    771   O    ASN A  100      10.130  54.758  58.328  1.00 11.02           O
ATOM    772   CB   ASN A  100      11.885  52.771  56.214  1.00  8.28           C
ATOM    773   CG   ASN A  100      10.468  52.367  55.855  1.00 12.48           C
ATOM    774   OD1  ASN A  100      10.032  51.173  56.016  1.00 15.21           O
ATOM    775   ND2  ASN A  100       9.731  53.335  55.354  1.00  9.35           N
ATOM    776   N    LEU A  101      11.592  55.744  56.935  1.00 10.12           N
ATOM    777   CA   LEU A  101      10.925  57.059  56.993  1.00 11.96           C
ATOM    778   C    LEU A  101       9.508  57.171  56.402  1.00 11.71           C
ATOM    779   O    LEU A  101       8.845  58.215  56.559  1.00 12.31           O
ATOM    780   CB   LEU A  101      11.855  58.110  56.382  1.00 10.32           C
ATOM    781   CG   LEU A  101      13.183  58.123  57.167  1.00 12.69           C
ATOM    782   CD1  LEU A  101      14.161  59.067  56.447  1.00 11.42           C
ATOM    783   CD2  LEU A  101      12.916  58.611  58.629  1.00 13.03           C
ATOM    784   N    SER A  102       9.010  56.122  55.767  1.00 11.69           N
ATOM    785   CA   SER A  102       7.607  56.201  55.267  1.00 12.81           C
ATOM    786   C    SER A  102       6.626  55.764  56.346  1.00 12.22           C
ATOM    787   O    SER A  102       5.419  56.021  56.233  1.00 12.70           O
ATOM    788   CB   SER A  102       7.367  55.274  54.080  1.00 10.56           C
ATOM    789   OG   SER A  102       7.299  53.945  54.529  1.00 11.71           O
ATOM    790   N    GLY A  103       7.148  55.094  57.368  1.00 11.76           N
ATOM    791   CA   GLY A  103       6.321  54.576  58.452  1.00 11.94           C
ATOM    792   C    GLY A  103       5.646  53.238  58.110  1.00 11.88           C
ATOM    793   O    GLY A  103       4.989  52.655  58.972  1.00 14.48           O
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| ATOM | 794 | N | HIS A 104 | 5.828 | 52.753 | 56.878 | 1.00 | 11.64 | N |
|------|-----|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 795 | CA | HIS A 104 | 5.241 | 51.490 | 56.438 | 1.00 | 10.27 | C |
| ATOM | 796 | C | HIS A 104 | 6.148 | 50.271 | 56.561 | 1.00 | 13.55 | C |
| ATOM | 797 | O | HIS A 104 | 7.362 | 50.398 | 56.695 | 1.00 | 11.86 | O |
| ATOM | 798 | CB | HIS A 104 | 4.763 | 51.628 | 54.981 | 1.00 | 12.39 | C |
| ATOM | 799 | CG | HIS A 104 | 3.540 | 52.493 | 54.839 | 1.00 | 12.25 | C |
| ATOM | 800 | ND1 | HIS A 104 | 3.549 | 53.716 | 54.198 | 1.00 | 15.06 | N |
| ATOM | 801 | CD2 | HIS A 104 | 2.272 | 52.308 | 55.280 | 1.00 | 13.39 | C |
| ATOM | 802 | CE1 | HIS A 104 | 2.338 | 54.258 | 54.258 | 1.00 | 10.81 | C |
| ATOM | 803 | NE2 | HIS A 104 | 1.543 | 53.422 | 54.913 | 1.00 | 14.72 | N |
| ATOM | 804 | N | THR A 105 | 5.509 | 49.093 | 56.577 | 1.00 | 11.21 | N |
| ATOM | 805 | CA | THR A 105 | 6.210 | 47.812 | 56.620 | 1.00 | 13.23 | C |
| ATOM | 806 | C | THR A 105 | 6.392 | 47.451 | 55.141 | 1.00 | 12.88 | C |
| ATOM | 807 | O | THR A 105 | 5.440 | 47.455 | 54.379 | 1.00 | 12.30 | O |
| ATOM | 808 | CB | THR A 105 | 5.325 | 46.740 | 57.350 | 1.00 | 12.08 | C |
| ATOM | 809 | OG1 | THR A 105 | 5.209 | 47.106 | 58.732 | 1.00 | 13.77 | O |
| ATOM | 810 | CG2 | THR A 105 | 5.946 | 45.329 | 57.271 | 1.00 | 14.93 | C |
| ATOM | 811 | N | TYR A 106 | 7.620 | 47.156 | 54.712 | 1.00 | 12.65 | N |
| ATOM | 812 | CA | TYR A 106 | 7.828 | 46.770 | 53.320 | 1.00 | 13.14 | C |
| ATOM | 813 | C | TYR A 106 | 8.728 | 45.577 | 53.141 | 1.00 | 12.53 | C |
| ATOM | 814 | O | TYR A 106 | 9.570 | 45.316 | 53.996 | 1.00 | 14.01 | O |
| ATOM | 815 | CB | TYR A 106 | 8.562 | 47.857 | 52.520 | 1.00 | 12.09 | C |
| ATOM | 816 | CG | TYR A 106 | 7.824 | 49.137 | 52.335 | 1.00 | 12.80 | C |
| ATOM | 817 | CD1 | TYR A 106 | 6.580 | 49.158 | 51.679 | 1.00 | 12.72 | C |
| ATOM | 818 | CD2 | TYR A 106 | 8.420 | 50.362 | 52.684 | 1.00 | 15.17 | C |
| ATOM | 819 | CE1 | TYR A 106 | 5.953 | 50.377 | 51.353 | 1.00 | 13.45 | C |
| ATOM | 820 | CE2 | TYR A 106 | 7.794 | 51.588 | 52.358 | 1.00 | 13.29 | C |
| ATOM | 821 | CZ | TYR A 106 | 6.565 | 51.590 | 51.689 | 1.00 | 14.28 | C |
| ATOM | 822 | OH | TYR A 106 | 5.917 | 52.823 | 51.346 | 1.00 | 10.79 | O |
| ATOM | 823 | N | PRO A 107 | 8.556 | 44.846 | 52.022 | 1.00 | 13.68 | N |
| ATOM | 824 | CA | PRO A 107 | 9.393 | 43.697 | 51.682 | 1.00 | 15.72 | C |
| ATOM | 825 | C | PRO A 107 | 10.689 | 44.374 | 51.178 | 1.00 | 15.28 | C |
| ATOM | 826 | O | PRO A 107 | 10.743 | 45.602 | 50.982 | 1.00 | 18.00 | O |
| ATOM | 827 | CB | PRO A 107 | 8.608 | 42.993 | 50.572 | 1.00 | 15.53 | C |
| ATOM | 828 | CG | PRO A 107 | 7.777 | 44.072 | 49.948 | 1.00 | 15.15 | C |
| ATOM | 829 | CD | PRO A 107 | 7.355 | 44.895 | 51.160 | 1.00 | 15.68 | C |
| ATOM | 830 | N | ASP A 108 | 11.731 | 43.601 | 50.955 | 1.00 | 17.91 | N |
| ATOM | 831 | CA | ASP A 108 | 13.032 | 44.156 | 50.592 | 1.00 | 17.04 | C |
| ATOM | 832 | C | ASP A 108 | 13.176 | 44.432 | 49.094 | 1.00 | 16.77 | C |
| ATOM | 833 | O | ASP A 108 | 13.859 | 43.697 | 48.397 | 1.00 | 14.66 | O |
| ATOM | 834 | CB | ASP A 108 | 14.090 | 43.177 | 51.092 | 1.00 | 18.54 | C |
| ATOM | 835 | CG | ASP A 108 | 15.459 | 43.754 | 51.086 | 1.00 | 18.91 | C |
| ATOM | 836 | OD1 | ASP A 108 | 15.572 | 44.980 | 51.102 | 1.00 | 18.68 | O |
| ATOM | 837 | OD2 | ASP A 108 | 16.439 | 42.977 | 51.099 | 1.00 | 20.61 | O |
| ATOM | 838 | N | GLN A 109 | 12.543 | 45.527 | 48.637 | 1.00 | 15.41 | N |
| ATOM | 839 | CA | GLN A 109 | 12.508 | 45.928 | 47.233 | 1.00 | 13.68 | C |
| ATOM | 840 | C | GLN A 109 | 12.781 | 47.428 | 46.967 | 1.00 | 13.65 | C |
| ATOM | 841 | O | GLN A 109 | 12.298 | 47.998 | 45.964 | 1.00 | 12.10 | O |
| ATOM | 842 | CB | GLN A 109 | 11.146 | 45.520 | 46.648 | 1.00 | 15.16 | C |
| ATOM | 843 | CG | GLN A 109 | 10.902 | 44.000 | 46.767 | 1.00 | 17.42 | C |
| ATOM | 844 | CD | GLN A 109 | 9.593 | 43.532 | 46.120 | 1.00 | 18.48 | C |
| ATOM | 845 | OE1 | GLN A 109 | 9.423 | 43.639 | 44.914 | 1.00 | 18.14 | O |
| ATOM | 846 | NE2 | GLN A 109 | 8.684 | 43.020 | 46.924 | 1.00 | 18.99 | N |
| ATOM | 847 | N | SER A 110 | 13.590 | 48.044 | 47.828 | 1.00 | 14.59 | N |
| ATOM | 848 | CA | SER A 110 | 13.932 | 49.473 | 47.707 | 1.00 | 14.05 | C |
| ATOM | 849 | C | SER A 110 | 12.701 | 50.368 | 47.543 | 1.00 | 13.65 | C |
| ATOM | 850 | O | SER A 110 | 12.691 | 51.281 | 46.710 | 1.00 | 14.45 | O |
| ATOM | 851 | CB | SER A 110 | 14.915 | 49.714 | 46.529 | 1.00 | 17.73 | C |
| ATOM | 852 | OG | SER A 110 | 16.188 | 49.113 | 46.794 | 1.00 | 19.23 | O |
| ATOM | 853 | N | LEU A 111 | 11.685 | 50.115 | 48.371 | 1.00 | 12.68 | N |
| ATOM | 854 | CA | LEU A 111 | 10.440 | 50.873 | 48.368 | 1.00 | 12.62 | C |
| ATOM | 855 | C | LEU A 111 | 10.437 | 52.072 | 49.332 | 1.00 | 11.47 | C |
| ATOM | 856 | O | LEU A 111 | 9.654 | 52.973 | 49.142 | 1.00 | 13.94 | O |
| ATOM | 857 | CB | LEU A 111 | 9.288 | 49.940 | 48.764 | 1.00 | 12.67 | C |
| ATOM | 858 | CG | LEU A 111 | 9.043 | 48.767 | 47.829 | 1.00 | 13.92 | C |
| ATOM | 859 | CD1 | LEU A 111 | 7.989 | 47.800 | 48.497 | 1.00 | 17.29 | C |
| ATOM | 860 | CD2 | LEU A 111 | 8.571 | 49.257 | 46.472 | 1.00 | 16.62 | C |
| ATOM | 861 | N | TYR A 112 | 11.306 | 52.076 | 50.341 | 1.00 | 12.08 | N |
| ATOM | 862 | CA | TYR A 112 | 11.326 | 53.142 | 51.337 | 1.00 | 10.91 | C |
| ATOM | 863 | C | TYR A 112 | 12.122 | 54.363 | 50.880 | 1.00 | 11.60 | C |
| ATOM | 864 | O | TYR A 112 | 12.878 | 54.269 | 49.914 | 1.00 | 12.41 | O |
| ATOM | 865 | CB | TYR A 112 | 11.818 | 52.610 | 52.694 | 1.00 | 10.47 | C |
| ATOM | 866 | CG | TYR A 112 | 13.255 | 52.028 | 52.651 | 1.00 | 13.10 | C |
| ATOM | 867 | CD1 | TYR A 112 | 14.377 | 52.884 | 52.564 | 1.00 | 13.03 | C |
| ATOM | 868 | CD2 | TYR A 112 | 13.474 | 50.642 | 52.677 | 1.00 | 14.22 | C |
| ATOM | 869 | CE1 | TYR A 112 | 15.672 | 52.391 | 52.517 | 1.00 | 12.77 | C |
| ATOM | 870 | CE2 | TYR A 112 | 14.789 | 50.105 | 52.615 | 1.00 | 11.96 | C |
| ATOM | 871 | CZ | TYR A 112 | 15.883 | 50.993 | 52.543 | 1.00 | 13.25 | C |
| ATOM | 872 | OH | TYR A 112 | 17.185 | 50.497 | 52.508 | 1.00 | 13.71 | O |
| ATOM | 873 | N | PRO A 113 | 11.903 | 55.539 | 51.528 | 1.00 | 11.77 | N |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 874 | CA | PRO | A | 113 | 12.609 | 56.777 | 51.178 | 1.00 12.74 | C |
| ATOM | 875 | C | PRO | A | 113 | 14.118 | 56.542 | 51.278 | 1.00 12.03 | C |
| ATOM | 876 | O | PRO | A | 113 | 14.582 | 55.969 | 52.241 | 1.00 12.41 | O |
| ATOM | 877 | CB | PRO | A | 113 | 12.105 | 57.782 | 52.199 | 1.00 12.09 | C |
| ATOM | 878 | CG | PRO | A | 113 | 10.647 | 57.273 | 52.469 | 1.00 14.59 | C |
| ATOM | 879 | CD | PRO | A | 113 | 10.914 | 55.764 | 52.598 | 1.00 11.22 | C |
| ATOM | 880 | N | ALA | A | 114 | 14.843 | 56.970 | 50.255 | 1.00 12.79 | N |
| ATOM | 881 | CA | ALA | A | 114 | 16.305 | 56.778 | 50.183 | 1.00 13.64 | C |
| ATOM | 882 | C | ALA | A | 114 | 17.170 | 57.326 | 51.337 | 1.00 13.11 | C |
| ATOM | 883 | O | ALA | A | 114 | 18.367 | 56.953 | 51.443 | 1.00 16.22 | O |
| ATOM | 884 | CB | ALA | A | 114 | 16.809 | 57.312 | 48.857 | 1.00 11.97 | C |
| ATOM | 885 | N | ASN | A | 115 | 16.626 | 58.177 | 52.186 | 1.00 13.41 | N |
| ATOM | 886 | CA | ASN | A | 115 | 17.409 | 58.668 | 53.316 | 1.00 12.96 | C |
| ATOM | 887 | C | ASN | A | 115 | 17.121 | 57.889 | 54.585 | 1.00 10.47 | C |
| ATOM | 888 | O | ASN | A | 115 | 17.496 | 58.308 | 55.671 | 1.00 10.24 | O |
| ATOM | 889 | CB | ASN | A | 115 | 17.217 | 60.191 | 53.541 | 1.00 14.49 | C |
| ATOM | 890 | CG | ASN | A | 115 | 15.788 | 60.585 | 53.838 | 1.00 13.70 | C |
| ATOM | 891 | OD1 | ASN | A | 115 | 14.843 | 59.929 | 53.423 | 1.00 12.87 | O |
| ATOM | 892 | ND2 | ASN | A | 115 | 15.626 | 61.701 | 54.533 | 1.00 14.56 | N |
| ATOM | 893 | N | SER | A | 116 | 16.457 | 56.730 | 54.459 | 1.00  8.79 | N |
| ATOM | 894 | CA | SER | A | 116 | 16.146 | 55.973 | 55.640 | 1.00  9.63 | C |
| ATOM | 895 | C | SER | A | 116 | 17.361 | 55.338 | 56.325 | 1.00  9.11 | C |
| ATOM | 896 | O | SER | A | 116 | 17.544 | 55.501 | 57.542 | 1.00 10.68 | O |
| ATOM | 897 | CB | SER | A | 116 | 15.077 | 54.886 | 55.337 | 1.00 11.24 | C |
| ATOM | 898 | OG | SER | A | 116 | 13.812 | 55.488 | 54.941 | 1.00 10.71 | O |
| ATOM | 899 | N | VAL | A | 117 | 18.197 | 54.646 | 55.570 | 1.00 11.30 | N |
| ATOM | 900 | CA | VAL | A | 117 | 19.358 | 54.006 | 56.204 | 1.00 12.41 | C |
| ATOM | 901 | C | VAL | A | 117 | 20.292 | 55.044 | 56.875 | 1.00 12.36 | C |
| ATOM | 902 | O | VAL | A | 117 | 20.743 | 54.826 | 58.009 | 1.00 12.60 | O |
| ATOM | 903 | CB | VAL | A | 117 | 20.085 | 53.092 | 55.213 | 1.00 11.68 | C |
| ATOM | 904 | CG1 | VAL | A | 117 | 21.389 | 52.625 | 55.790 | 1.00 12.55 | C |
| ATOM | 905 | CG2 | VAL | A | 117 | 19.179 | 51.877 | 54.873 | 1.00 13.65 | C |
| ATOM | 906 | N | PRO | A | 118 | 20.550 | 56.186 | 56.210 | 1.00 12.70 | N |
| ATOM | 907 | CA | PRO | A | 118 | 21.415 | 57.222 | 56.809 | 1.00 12.91 | C |
| ATOM | 908 | C | PRO | A | 118 | 20.815 | 57.642 | 58.147 | 1.00 13.86 | C |
| ATOM | 909 | O | PRO | A | 118 | 21.512 | 57.888 | 59.125 | 1.00 13.05 | O |
| ATOM | 910 | CB | PRO | A | 118 | 21.341 | 58.369 | 55.792 | 1.00 14.39 | C |
| ATOM | 911 | CG | PRO | A | 118 | 21.335 | 57.590 | 54.481 | 1.00 12.66 | C |
| ATOM | 912 | CD | PRO | A | 118 | 20.369 | 56.429 | 54.766 | 1.00 12.25 | C |
| ATOM | 913 | N | GLN | A | 119 | 19.499 | 57.797 | 58.190 | 1.00 14.57 | N |
| ATOM | 914 | CA | GLN | A | 119 | 18.924 | 58.173 | 59.461 | 1.00 14.99 | C |
| ATOM | 915 | C | GLN | A | 119 | 19.160 | 57.155 | 60.543 | 1.00 14.62 | C |
| ATOM | 916 | O | GLN | A | 119 | 19.360 | 57.543 | 61.708 | 1.00 16.00 | O |
| ATOM | 917 | CB | GLN | A | 119 | 17.415 | 58.436 | 59.361 | 1.00 18.27 | C |
| ATOM | 918 | CG | GLN | A | 119 | 17.095 | 59.787 | 58.796 | 1.00 23.81 | C |
| ATOM | 919 | CD | GLN | A | 119 | 17.651 | 60.920 | 59.636 | 1.00 28.59 | C |
| ATOM | 920 | OE1 | GLN | A | 119 | 18.868 | 61.193 | 59.622 | 1.00 30.79 | O |
| ATOM | 921 | NE2 | GLN | A | 119 | 16.761 | 61.592 | 60.383 | 1.00 28.07 | N |
| ATOM | 922 | N | VAL | A | 120 | 19.146 | 55.867 | 60.195 | 1.00 12.30 | N |
| ATOM | 923 | CA | VAL | A | 120 | 19.344 | 54.833 | 61.204 | 1.00 14.01 | C |
| ATOM | 924 | C | VAL | A | 120 | 20.829 | 54.781 | 61.577 | 1.00 14.14 | C |
| ATOM | 925 | O | VAL | A | 120 | 21.185 | 54.423 | 62.723 | 1.00 15.74 | O |
| ATOM | 926 | CB | VAL | A | 120 | 18.831 | 53.477 | 60.687 | 1.00 15.79 | C |
| ATOM | 927 | CG1 | VAL | A | 120 | 19.007 | 52.356 | 61.738 | 1.00 16.95 | C |
| ATOM | 928 | CG2 | VAL | A | 120 | 17.305 | 53.644 | 60.380 | 1.00 14.81 | C |
| ATOM | 929 | N | VAL | A | 121 | 21.684 | 55.162 | 60.639 | 1.00 13.78 | N |
| ATOM | 930 | CA | VAL | A | 121 | 23.112 | 55.211 | 60.951 | 1.00 14.29 | C |
| ATOM | 931 | C | VAL | A | 121 | 23.271 | 56.306 | 62.012 | 1.00 12.92 | C |
| ATOM | 932 | O | VAL | A | 121 | 23.956 | 56.087 | 63.017 | 1.00 14.79 | O |
| ATOM | 933 | CB | VAL | A | 121 | 24.001 | 55.581 | 59.733 | 1.00 16.15 | C |
| ATOM | 934 | CG1 | VAL | A | 121 | 25.476 | 55.821 | 60.230 | 1.00 14.47 | C |
| ATOM | 935 | CG2 | VAL | A | 121 | 23.985 | 54.470 | 58.704 | 1.00 13.89 | C |
| ATOM | 936 | N | ARG | A | 122 | 22.616 | 57.464 | 61.820 | 1.00 14.04 | N |
| ATOM | 937 | CA | ARG | A | 122 | 22.711 | 58.562 | 62.779 | 1.00 13.18 | C |
| ATOM | 938 | C | ARG | A | 122 | 22.171 | 58.155 | 64.161 | 1.00 14.13 | C |
| ATOM | 939 | O | ARG | A | 122 | 22.750 | 58.472 | 65.182 | 1.00 12.41 | O |
| ATOM | 940 | CB | ARG | A | 122 | 21.955 | 59.807 | 62.244 | 1.00 12.76 | C |
| ATOM | 941 | CG | ARG | A | 122 | 22.118 | 61.030 | 63.147 | 1.00 13.88 | C |
| ATOM | 942 | CD | ARG | A | 122 | 23.600 | 61.485 | 63.230 | 1.00 17.99 | C |
| ATOM | 943 | NE | ARG | A | 122 | 24.273 | 61.056 | 64.467 | 1.00 17.79 | N |
| ATOM | 944 | CZ | ARG | A | 122 | 25.478 | 61.488 | 64.856 | 1.00 18.40 | C |
| ATOM | 945 | NH1 | ARG | A | 122 | 26.155 | 62.361 | 64.088 | 1.00 18.13 | N |
| ATOM | 946 | NH2 | ARG | A | 122 | 25.972 | 61.096 | 66.035 | 1.00 15.37 | N |
| ATOM | 947 | N | ARG | A | 123 | 21.045 | 57.442 | 64.169 | 1.00 14.05 | N |
| ATOM | 948 | CA | ARG | A | 123 | 20.426 | 56.952 | 65.400 | 1.00 14.11 | C |
| ATOM | 949 | C | ARG | A | 123 | 21.373 | 56.023 | 66.153 | 1.00 13.74 | C |
| ATOM | 950 | O | ARG | A | 123 | 21.571 | 56.133 | 67.371 | 1.00 12.92 | O |
| ATOM | 951 | CB | ARG | A | 123 | 19.149 | 56.171 | 65.025 | 1.00 11.99 | C |
| ATOM | 952 | CG | ARG | A | 123 | 18.564 | 55.370 | 66.163 | 1.00 14.12 | C |
| ATOM | 953 | CD | ARG | A | 123 | 18.339 | 56.239 | 67.412 | 1.00 14.71 | C |

| ATOM | 954 | NE | ARG A 123 | 18.042 | 55.391 | 68.578 | 1.00 13.94 | N |
| ATOM | 955 | CZ | ARG A 123 | 18.356 | 55.694 | 69.825 | 1.00 12.44 | C |
| ATOM | 956 | NH1 | ARG A 123 | 18.984 | 56.857 | 70.087 | 1.00 13.74 | N |
| ATOM | 957 | NH2 | ARG A 123 | 18.065 | 54.828 | 70.798 | 1.00 12.19 | N |
| ATOM | 958 | N | ILE A 124 | 21.927 | 55.076 | 65.420 | 1.00 12.36 | N |
| ATOM | 959 | CA | ILE A 124 | 22.828 | 54.122 | 66.030 | 1.00 15.38 | C |
| ATOM | 960 | C | ILE A 124 | 24.020 | 54.810 | 66.666 | 1.00 13.46 | C |
| ATOM | 961 | O | ILE A 124 | 24.343 | 54.562 | 67.833 | 1.00 14.20 | O |
| ATOM | 962 | CB | ILE A 124 | 23.257 | 53.076 | 65.024 | 1.00 15.19 | C |
| ATOM | 963 | CG1 | ILE A 124 | 22.114 | 52.084 | 64.856 | 1.00 15.67 | C |
| ATOM | 964 | CG2 | ILE A 124 | 24.490 | 52.321 | 65.544 | 1.00 16.69 | C |
| ATOM | 965 | CD1 | ILE A 124 | 22.280 | 51.065 | 63.719 | 1.00 14.93 | C |
| ATOM | 966 | N | ASN A 125 | 24.658 | 55.695 | 65.922 | 1.00 14.76 | N |
| ATOM | 967 | CA | ASN A 125 | 25.750 | 56.438 | 66.505 | 1.00 15.09 | C |
| ATOM | 968 | C | ASN A 125 | 25.276 | 57.265 | 67.747 | 1.00 16.64 | C |
| ATOM | 969 | O | ASN A 125 | 25.993 | 57.367 | 68.745 | 1.00 16.13 | O |
| ATOM | 970 | CB | ASN A 125 | 26.363 | 57.346 | 65.453 | 1.00 15.58 | C |
| ATOM | 971 | CG | ASN A 125 | 27.409 | 56.624 | 64.611 | 1.00 18.87 | C |
| ATOM | 972 | OD1 | ASN A 125 | 28.080 | 55.738 | 65.117 | 1.00 20.13 | O |
| ATOM | 973 | ND2 | ASN A 125 | 27.560 | 57.018 | 63.336 | 1.00 18.00 | N |
| ATOM | 974 | N | ASN A 126 | 24.087 | 57.877 | 67.705 | 1.00 15.60 | N |
| ATOM | 975 | CA | ASN A 126 | 23.620 | 58.643 | 68.865 | 1.00 13.90 | C |
| ATOM | 976 | C | ASN A 126 | 23.476 | 57.705 | 70.074 | 1.00 15.98 | C |
| ATOM | 977 | O | ASN A 126 | 23.764 | 58.094 | 71.218 | 1.00 17.00 | O |
| ATOM | 978 | CB | ASN A 126 | 22.248 | 59.338 | 68.627 | 1.00 13.87 | C |
| ATOM | 979 | CG | ASN A 126 | 22.317 | 60.456 | 67.600 | 1.00 15.02 | C |
| ATOM | 980 | OD1 | ASN A 126 | 23.391 | 61.028 | 67.349 | 1.00 12.11 | O |
| ATOM | 981 | ND2 | ASN A 126 | 21.156 | 60.827 | 67.024 | 1.00 12.44 | N |
| ATOM | 982 | N | ALA A 127 | 23.022 | 56.481 | 69.839 | 1.00 15.70 | N |
| ATOM | 983 | CA | ALA A 127 | 22.845 | 55.581 | 70.964 | 1.00 15.80 | C |
| ATOM | 984 | C | ALA A 127 | 24.160 | 55.100 | 71.523 | 1.00 14.06 | C |
| ATOM | 985 | O | ALA A 127 | 24.287 | 54.927 | 72.731 | 1.00 12.72 | O |
| ATOM | 986 | CB | ALA A 127 | 21.991 | 54.374 | 70.594 | 1.00 13.91 | C |
| ATOM | 987 | N | LEU A 128 | 25.115 | 54.839 | 70.637 | 1.00 16.22 | N |
| ATOM | 988 | CA | LEU A 128 | 26.402 | 54.350 | 71.114 | 1.00 17.04 | C |
| ATOM | 989 | C | LEU A 128 | 27.063 | 55.486 | 71.852 | 1.00 18.59 | C |
| ATOM | 990 | O | LEU A 128 | 27.751 | 55.236 | 72.846 | 1.00 19.89 | O |
| ATOM | 991 | CB | LEU A 128 | 27.289 | 53.871 | 69.960 | 1.00 17.89 | C |
| ATOM | 992 | CG | LEU A 128 | 26.838 | 52.607 | 69.215 | 1.00 18.95 | C |
| ATOM | 993 | CD1 | LEU A 128 | 27.830 | 52.329 | 68.068 | 1.00 18.07 | C |
| ATOM | 994 | CD2 | LEU A 128 | 26.745 | 51.428 | 70.150 | 1.00 18.54 | C |
| ATOM | 995 | N | GLN A 129 | 26.858 | 56.724 | 71.377 | 1.00 17.01 | N |
| ATOM | 996 | CA | GLN A 129 | 27.426 | 57.908 | 72.027 | 1.00 18.25 | C |
| ATOM | 997 | C | GLN A 129 | 26.894 | 58.076 | 73.423 | 1.00 17.55 | C |
| ATOM | 998 | O | GLN A 129 | 27.648 | 58.363 | 74.340 | 1.00 17.18 | O |
| ATOM | 999 | CB | GLN A 129 | 27.136 | 59.188 | 71.238 | 1.00 15.71 | C |
| ATOM | 1000 | CG | GLN A 129 | 28.128 | 59.350 | 70.111 | 1.00 17.50 | C |
| ATOM | 1001 | CD | GLN A 129 | 27.809 | 60.547 | 69.293 | 1.00 23.07 | C |
| ATOM | 1002 | OE1 | GLN A 129 | 26.710 | 60.644 | 68.742 | 1.00 21.86 | O |
| ATOM | 1003 | NE2 | GLN A 129 | 28.758 | 61.490 | 69.203 | 1.00 21.93 | N |
| ATOM | 1004 | N | ARG A 130 | 25.586 | 57.892 | 73.588 | 1.00 17.90 | N |
| ATOM | 1005 | CA | ARG A 130 | 25.005 | 57.986 | 74.925 | 1.00 18.33 | C |
| ATOM | 1006 | C | ARG A 130 | 25.629 | 56.904 | 75.834 | 1.00 20.42 | C |
| ATOM | 1007 | O | ARG A 130 | 25.979 | 57.178 | 76.983 | 1.00 19.81 | O |
| ATOM | 1008 | CB | ARG A 130 | 23.473 | 57.795 | 74.875 | 1.00 18.55 | C |
| ATOM | 1009 | CG | ARG A 130 | 22.809 | 58.051 | 76.225 | 1.00 16.04 | C |
| ATOM | 1010 | CD | ARG A 130 | 22.897 | 59.527 | 76.553 | 1.00 16.45 | C |
| ATOM | 1011 | NE | ARG A 130 | 21.899 | 60.282 | 75.800 | 1.00 15.52 | N |
| ATOM | 1012 | CZ | ARG A 130 | 22.046 | 61.504 | 75.293 | 1.00 14.24 | C |
| ATOM | 1013 | NH1 | ARG A 130 | 23.194 | 62.208 | 75.407 | 1.00 16.88 | N |
| ATOM | 1014 | NH2 | ARG A 130 | 21.002 | 62.052 | 74.703 | 1.00 13.98 | N |
| ATOM | 1015 | N | ALA A 131 | 25.732 | 55.670 | 75.337 | 1.00 18.91 | N |
| ATOM | 1016 | CA | ALA A 131 | 26.301 | 54.612 | 76.143 | 1.00 20.63 | C |
| ATOM | 1017 | C | ALA A 131 | 27.688 | 55.022 | 76.538 | 1.00 20.92 | C |
| ATOM | 1018 | O | ALA A 131 | 28.095 | 54.812 | 77.692 | 1.00 25.00 | O |
| ATOM | 1019 | CB | ALA A 131 | 26.327 | 53.275 | 75.370 | 1.00 18.50 | C |
| ATOM | 1020 | N | ASP A 132 | 28.407 | 55.604 | 75.584 | 1.00 21.23 | N |
| ATOM | 1021 | CA | ASP A 132 | 29.777 | 56.074 | 75.801 | 1.00 23.73 | C |
| ATOM | 1022 | C | ASP A 132 | 29.799 | 57.096 | 76.941 | 1.00 23.84 | C |
| ATOM | 1023 | O | ASP A 132 | 30.555 | 56.928 | 77.897 | 1.00 24.42 | O |
| ATOM | 1024 | CB | ASP A 132 | 30.316 | 56.714 | 74.525 | 1.00 23.79 | C |
| ATOM | 1025 | CG | ASP A 132 | 31.727 | 57.246 | 74.683 | 1.00 24.03 | C |
| ATOM | 1026 | OD1 | ASP A 132 | 32.632 | 56.453 | 75.031 | 1.00 27.51 | O |
| ATOM | 1027 | OD2 | ASP A 132 | 31.948 | 58.453 | 74.447 | 1.00 26.70 | O |
| ATOM | 1028 | N | GLN A 133 | 28.968 | 58.141 | 76.828 | 1.00 22.13 | N |
| ATOM | 1029 | CA | GLN A 133 | 28.827 | 59.185 | 77.839 | 1.00 21.43 | C |
| ATOM | 1030 | C | GLN A 133 | 28.472 | 58.630 | 79.226 | 1.00 22.01 | C |
| ATOM | 1031 | O | GLN A 133 | 28.982 | 59.113 | 80.227 | 1.00 24.19 | O |
| ATOM | 1032 | CB | GLN A 133 | 27.729 | 60.173 | 77.452 | 1.00 20.82 | C |
| ATOM | 1033 | CG | GLN A 133 | 28.056 | 61.118 | 76.312 | 1.00 17.11 | C |

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ATOM   1034  CD   GLN A 133      26.840  61.441  75.431  1.00 20.98           C
ATOM   1035  OE1  GLN A 133      26.993  61.978  74.330  1.00 23.79           O
ATOM   1036  NE2  GLN A 133      25.643  61.085  75.895  1.00 18.69           N
ATOM   1037  N    ILE A 134      27.574  57.653  79.291  1.00 21.20           N
ATOM   1038  CA   ILE A 134      27.172  57.073  80.561  1.00 22.81           C
ATOM   1039  C    ILE A 134      28.330  56.274  81.187  1.00 23.82           C
ATOM   1040  O    ILE A 134      28.617  56.419  82.378  1.00 22.69           O
ATOM   1041  CB   ILE A 134      25.958  56.131  80.369  1.00 21.18           C
ATOM   1042  CG1  ILE A 134      24.705  56.952  80.024  1.00 19.47           C
ATOM   1043  CG2  ILE A 134      25.759  55.245  81.585  1.00 21.02           C
ATOM   1044  CD1  ILE A 134      23.640  56.083  79.409  1.00 15.75           C
ATOM   1045  N    ALA A 135      28.999  55.453  80.374  1.00 24.83           N
ATOM   1046  CA   ALA A 135      30.096  54.625  80.875  1.00 25.28           C
ATOM   1047  C    ALA A 135      31.193  55.514  81.454  1.00 26.58           C
ATOM   1048  O    ALA A 135      31.866  55.138  82.410  1.00 28.07           O
ATOM   1049  CB   ALA A 135      30.645  53.744  79.766  1.00 25.33           C
ATOM   1050  N    LYS A 136      31.354  56.701  80.894  1.00 26.18           N
ATOM   1051  CA   LYS A 136      32.360  57.615  81.407  1.00 27.54           C
ATOM   1052  C    LYS A 136      32.021  58.107  82.822  1.00 28.46           C
ATOM   1053  O    LYS A 136      32.875  58.077  83.708  1.00 28.43           O
ATOM   1054  CB   LYS A 136      32.531  58.812  80.480  1.00 27.09           C
ATOM   1055  CG   LYS A 136      33.760  59.656  80.831  1.00 27.89           C
ATOM   1056  CD   LYS A 136      33.842  60.911  80.023  1.00 26.51           C
ATOM   1057  CE   LYS A 136      35.279  61.395  79.847  1.00 27.32           C
ATOM   1058  NZ   LYS A 136      35.369  62.686  79.060  1.00 28.57           N
ATOM   1059  N    ILE A 137      30.789  58.564  83.052  1.00 28.01           N
ATOM   1060  CA   ILE A 137      30.449  59.034  84.394  1.00 27.74           C
ATOM   1061  C    ILE A 137      30.235  57.888  85.366  1.00 27.80           C
ATOM   1062  O    ILE A 137      30.184  58.104  86.572  1.00 27.84           O
ATOM   1063  CB   ILE A 137      29.179  59.916  84.439  1.00 26.93           C
ATOM   1064  CG1  ILE A 137      27.949  59.076  84.129  1.00 26.12           C
ATOM   1065  CG2  ILE A 137      29.341  61.099  83.538  1.00 26.87           C
ATOM   1066  CD1  ILE A 137      26.652  59.814  84.271  1.00 26.63           C
ATOM   1067  N    GLU A 138      30.092  56.670  84.863  1.00 27.11           N
ATOM   1068  CA   GLU A 138      29.897  55.550  85.763  1.00 28.35           C
ATOM   1069  C    GLU A 138      31.252  54.877  86.048  1.00 30.43           C
ATOM   1070  O    GLU A 138      31.339  53.969  86.871  1.00 30.07           O
ATOM   1071  CB   GLU A 138      28.898  54.542  85.161  1.00 28.35           C
ATOM   1072  CG   GLU A 138      27.438  55.069  85.049  1.00 27.20           C
ATOM   1073  CD   GLU A 138      26.425  53.958  84.741  1.00 26.87           C
ATOM   1074  OE1  GLU A 138      26.814  52.974  84.093  1.00 29.73           O
ATOM   1075  OE2  GLU A 138      25.245  54.062  85.126  1.00 26.56           O
ATOM   1076  N    GLY A 139      32.299  55.359  85.385  1.00 31.87           N
ATOM   1077  CA   GLY A 139      33.614  54.758  85.524  1.00 34.68           C
ATOM   1078  C    GLY A 139      33.641  53.324  84.998  1.00 35.48           C
ATOM   1079  O    GLY A 139      34.431  52.483  85.461  1.00 34.47           O
ATOM   1080  N    ASP A 140      32.785  53.041  84.017  1.00 35.47           N
ATOM   1081  CA   ASP A 140      32.693  51.712  83.405  1.00 35.10           C
ATOM   1082  C    ASP A 140      33.698  51.524  82.262  1.00 35.62           C
ATOM   1083  O    ASP A 140      33.595  52.187  81.229  1.00 32.18           O
ATOM   1084  CB   ASP A 140      31.292  51.495  82.849  1.00 35.60           C
ATOM   1085  CG   ASP A 140      31.109  50.117  82.267  1.00 35.31           C
ATOM   1086  OD1  ASP A 140      32.112  49.384  82.137  1.00 35.55           O
ATOM   1087  OD2  ASP A 140      29.960  49.770  81.946  1.00 34.94           O
ATOM   1088  N    THR A 141      34.651  50.605  82.449  1.00 35.61           N
ATOM   1089  CA   THR A 141      35.662  50.324  81.439  1.00 36.30           C
ATOM   1090  C    THR A 141      35.435  48.954  80.821  1.00 36.02           C
ATOM   1091  O    THR A 141      36.265  48.463  80.061  1.00 35.99           O
ATOM   1092  CB   THR A 141      37.142  50.396  82.023  1.00 38.40           C
ATOM   1093  OG1  THR A 141      37.319  49.424  83.067  1.00 39.34           O
ATOM   1094  CG2  THR A 141      37.446  51.800  82.560  1.00 37.92           C
ATOM   1095  N    SER A 142      34.296  48.345  81.118  1.00 35.44           N
ATOM   1096  CA   SER A 142      33.998  47.035  80.581  1.00 36.45           C
ATOM   1097  C    SER A 142      34.009  46.987  79.040  1.00 36.37           C
ATOM   1098  O    SER A 142      34.141  45.909  78.461  1.00 38.44           O
ATOM   1099  CB   SER A 142      32.652  46.540  81.117  1.00 36.23           C
ATOM   1100  OG   SER A 142      31.572  46.990  80.323  1.00 40.37           O
ATOM   1101  N    VAL A 143      33.864  48.140  78.386  1.00 34.30           N
ATOM   1102  CA   VAL A 143      33.881  48.209  76.927  1.00 32.20           C
ATOM   1103  C    VAL A 143      34.990  49.150  76.461  1.00 31.89           C
ATOM   1104  O    VAL A 143      35.050  50.320  76.833  1.00 30.27           O
ATOM   1105  CB   VAL A 143      32.525  48.714  76.333  1.00 32.22           C
ATOM   1106  CG1  VAL A 143      32.672  48.948  74.834  1.00 29.83           C
ATOM   1107  CG2  VAL A 143      31.443  47.705  76.568  1.00 31.72           C
ATOM   1108  N    GLU A 144      35.866  48.640  75.619  1.00 31.85           N
ATOM   1109  CA   GLU A 144      36.968  49.452  75.140  1.00 32.70           C
ATOM   1110  C    GLU A 144      36.571  50.534  74.138  1.00 31.03           C
ATOM   1111  O    GLU A 144      37.061  51.669  74.216  1.00 31.71           O
ATOM   1112  CB   GLU A 144      38.038  48.550  74.518  1.00 36.25           C
ATOM   1113  CG   GLU A 144      37.730  47.042  74.567  1.00 40.16           C
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ATOM   1114  CD   GLU A 144    36.434  46.643  73.845  1.00 44.18           C
ATOM   1115  OE1  GLU A 144    36.226  47.085  72.677  1.00 45.90           O
ATOM   1116  OE2  GLU A 144    35.628  45.880  74.447  1.00 43.12           O
ATOM   1117  N    ASN A 145    35.698  50.197  73.189  1.00 28.66           N
ATOM   1118  CA   ASN A 145    35.275  51.170  72.175  1.00 27.25           C
ATOM   1119  C    ASN A 145    33.764  51.093  72.000  1.00 26.45           C
ATOM   1120  O    ASN A 145 ·  33.256  50.125  71.408  1.00 26.28           O
ATOM   1121  CB   ASN A 145    35.925  50.846  70.828  1.00 28.20           C
ATOM   1122  CG   ASN A 145    35.461  51.771  69.719  1.00 28.37           C
ATOM   1123  OD1  ASN A 145    35.472  51.403  68.532  1.00 30.86           O
ATOM   1124  ND2  ASN A 145    35.063  52.974  70.087  1.00 26.02           N
ATOM   1125  N    TRP A 146    33.044  52.061  72.557  1.00 25.01           N
ATOM   1126  CA   TRP A 146    31.580  52.077 ·72.419  1.00 24.09           C
ATOM   1127  C    TRP A 146    31.206  52.426  70.981  1.00 23.11           C
ATOM   1128  O    TRP A 146    30.221  51.927  70.459  1.00 22.77           O
ATOM   1129  CB   TRP A 146    30.950  53.094  73.370  1.00 22.08           C
ATOM   1130  CG   TRP A 146    30.695  52.515  74.706  1.00 22.70           C
ATOM   1131  CD1  TRP A 146    31.392  52.744  75.857  1.00 22.33           C
ATOM   1132  CD2  TRP A 146    29.687  51.549  75.029  1.00 22.31           C
ATOM   1133  NE1  TRP A 146    30.886  51.972  76.872  1.00 23.03           N
ATOM   1134  CE2  TRP A 146    29.834  51.236  76.390  1.00 21.33           C
ATOM   1135  CE3  TRP A 146    28.673  50.919  74.291  1.00 20.97           C
ATOM · 1136  CZ2  TRP A 146    29.002  50.325  77.040  1.00 22.52           C
ATOM   1137  CZ3  TRP A 146    27.846  50.008  74.941  1.00 21.84           C
ATOM   1138  CH2  TRP A 146    28.014  49.721  76.299  1.00 21.88           C
ATOM   1139  N    LEU A 147    31.995  53.284  70.343  1.00 23.35           N
ATOM   1140  CA   LEU A 147    31.703  53.646  68.960  1.00 25.00           C
ATOM   1141  C    LEU A 147    32.175  52.619  67.938  1.00 23.99           C
ATOM   1142  O    LEU A 147    33.063  52.905  67.156  1.00 25.68           O
ATOM   1143  CB   LEU A 147    32.321  54.985  68.626  1.00 25.22           C
ATOM   1144  CG   LEU A 147    31.431  56.117  69.118  1.00 27.90           C
ATOM   1145  CD1  LEU A 147    32.203  57.370  68.964  1.00 28.91           C
ATOM   1146  CD2  LEU A 147    30.107  56.181  68.309  1.00 27.11           C
ATOM   1147  N    ALA A 148    31.581  51.434  67.968  1.00 22.30           N
ATOM   1148  CA   ALA A 148    31.898  50.381  67.009  1.00 21.96           C
ATOM   1149  C    ALA A 148    31.589  50.882  65.582  1.00 21.99           C ·
ATOM   1150  O    ALA A 148    30.630  51.652  65.368  1.00 21.52           O
ATOM   1151  CB   ALA A 148    31.066  49.175  67.311  1.00 20.88           C
ATOM   1152  N    PRO A 149    32.413  50.500  64.594  1.00 21.20           N
ATOM   1153  CA   PRO A 149    32.121  50.965  63.232  1.00 20.96           C
ATOM   1154  C    PRO A 149    30.824  50.317  62.723  1.00 19.53           C
ATOM   1155  O    PRO A 149    30.530  49.176  63.022  1.00 20.92           O
ATOM   1156  CB   PRO A 149    33.320  50.467  62.440  1.00 21.51           C
ATOM   1157  CG   PRO A 149    33.606  49.143  63.101  1.00 22.14           C
ATOM   1158  CD   PRO A 149    33.578  49.593  64.587  1.00 22.56           C
ATOM   1159  N    ILE A 150    30.072· 51.083  61.932  1.00 20.78           N
ATOM   1160  CA   ILE A 150    28.821  50.619  61.341  1.00 18.06           C
ATOM   1161  C    ILE A 150    29.044  50.351  59.847  1.00 17.43           C
ATOM   1162  O    ILE A 150    29.627  51.171  59.149  1.00 16.16           O
ATOM   1163  CB   ILE A 150    27.733  51.728  61.460  1.00 18.30           C
ATOM   1164  CG1  ILE A 150    27.422  52.002  62.934  1.00 17.82           C
ATOM   1165  CG2  ILE A 150    26.456  51.298  60.722  1.00 18.12           C
ATOM   1166  CD1  ILE A 150    26.848  53.356  63.153  1.00 16.84           C
ATOM   1167  N    VAL A 151    28.533  49.230  59.357  1.00 17.17           N
ATOM   1168  CA   VAL A 151    28.653  48.913  57.934  1.00 18.41           C
ATOM   1169  C    VAL A 151    27.217  48.955  57.489  1.00 17.78           C
ATOM   1170  O    VAL A 151    26.409  48.204  58.015  1.00 20.09           O
ATOM   1171  CB   VAL A 151    29.209  47.485  57.716  1.00 19.05           C
ATOM   1172  CG1  VAL A 151    28.970  47.043  56.272  1.00 21.19           C
ATOM   1173  CG2  VAL A 151    30.690  47.477  58.041  1.00 20.00           C
ATOM   1174  N    ALA A 152    26.893  49.807  56.527  1.00 18.94           N
ATOM   1175  CA   ALA A 152    25.484  49.909  56.130  1.00 16.95           C
ATOM   1176  C    ALA A 152    25.184  49.596  54.686  1.00 17.61           C
ATOM   1177  O    ALA A 152    26.027  49.700  53.789  1.00 16.37           O
ATOM   1178  CB   ALA A 152    24.945  51.292  56.452  1.00 16.98           C
ATOM   1179  N    ASP A 153    23.905  49.286  54.501  1.00 17.30           N
ATOM   1180  CA   ASP A 153    23.294  48.884  53.242  1.00 17.85           C
ATOM   1181  C    ASP A 153    22.954  50.015  52.269  1.00 18.55           C
ATOM   1182  O    ASP A 153    22.079  50.835  52.545  1.00 17.88           O
ATOM   1183  CB   ASP A 153    22.018  48.119  53.601  1.00 17.52           C
ATOM   1184  CG   ASP A 153    21.527  47.233  52.492  1.00 15.81           C
ATOM   1185  OD1  ASP A 153    21.826  47.499  51.317  1.00 16.93           O
ATOM   1186  OD2  ASP A 153    20.825  46.253  52.814  1.00 17.26           O
ATOM   1187  N    GLY A 154    23.617  50.033  51.110  1.00 15.32           N
ATOM   1188  CA   GLY A 154    23.352  51.059  50.139  1.00 16.21           C
ATOM   1189  C    GLY A 154    22.469  50.508  49.048  1.00 13.32           C
ATOM   1190  O    GLY A 154    22.204  51.172  48.076  1.00 15.67           O
ATOM   1191  N    GLU A 155    22.020  49.271  49.246  1.00 16.77           N
ATOM   1192  CA   GLU A 155    21.161  48.562  48.322  1.00 18.14           C
ATOM   1193  C    GLU A 155    21.654  48.727  46.899  1.00 18.00           C
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ATOM   1194  O    GLU A 155      22.843  48.526  46.620  1.00 18.95           O
ATOM   1195  CB   GLU A 155      19.693  49.017  48.490  1.00 19.08           C
ATOM   1196  CG   GLU A 155      19.201  48.761  49.960  1.00 20.58           C
ATOM   1197  CD   GLU A 155      17.688  48.682  50.131  1.00 22.67           C
ATOM   1198  OE1  GLU A 155      16.948  49.081  49.209  1.00 22.18           O
ATOM   1199  OE2  GLU A 155      17.238  48.230  51.206  1.00 23.65           O
ATOM   1200  N    ALA A 156      20.782  49.097  45.991  1.00 17.51           N
ATOM   1201  CA   ALA A 156      21.234  49.230  44.626  1.00 18.17           C
ATOM   1202  C    ALA A 156      21.317  50.718  44.263  1.00 18.88           C
ATOM   1203  O    ALA A 156      21.255  51.095  43.098  1.00 21.20           O
ATOM   1204  CB   ALA A 156      20.299  48.434  43.704  1.00 16.92           C
ATOM   1205  N    GLY A 157      21.432  51.561  45.291  1.00 16.89           N
ATOM   1206  CA   GLY A 157      21.617  52.974  45.049  1.00 17.12           C
ATOM   1207  C    GLY A 157      20.435  53.859  44.820  1.00 15.60           C
ATOM   1208  O    GLY A 157      20.606  55.085  44.674  1.00 18.63           O
ATOM   1209  N    PHE A 158      19.246  53.269  44.819  1.00 15.22           N
ATOM   1210  CA   PHE A 158      18.005  54.053  44.611  1.00 15.91           C
ATOM   1211  C    PHE A 158      17.994  54.917  43.335  1.00 16.78           C
ATOM   1212  O    PHE A 158      17.404  55.989  43.315  1.00 18.26           O
ATOM   1213  CB   PHE A 158      17.752  54.928  45.825  1.00 16.85           C
ATOM   1214  CG   PHE A 158      17.389  54.155  47.034  1.00 18.19           C
ATOM   1215  CD1  PHE A 158      16.078  53.732  47.240  1.00 17.88           C
ATOM   1216  CD2  PHE A 158      18.359  53.833  47.991  1.00 18.40           C
ATOM   1217  CE1  PHE A 158      15.736  53.014  48.371  1.00 17.17           C
ATOM   1218  CE2  PHE A 158      18.015  53.107  49.133  1.00 19.62           C
ATOM   1219  CZ   PHE A 158      16.707  52.702  49.320  1.00 20.49           C
ATOM   1220  N    GLY A 159      18.684  54.465  42.290  1.00 16.53           N
ATOM   1221  CA   GLY A 159      18.647  55.213  41.053  1.00 19.09           C
ATOM   1222  C    GLY A 159      19.917  55.105  40.243  1.00 19.33           C
ATOM   1223  O    GLY A 159      20.432  54.014  40.056  1.00 19.61           O
ATOM   1224  N    GLY A 160      20.416  56.257  39.785  1.00 18.52           N
ATOM   1225  CA   GLY A 160      21.618  56.256  38.987  1.00 19.39           C
ATOM   1226  C    GLY A 160      22.816  56.583  39.852  1.00 21.11           C
ATOM   1227  O    GLY A 160      22.727  56.561  41.095  1.00 19.47           O
ATOM   1228  N    ALA A 161      23.928  56.903  39.192  1.00 19.37           N
ATOM   1229  CA   ALA A 161      25.177  57.250  39.872  1.00 18.74           C
ATOM   1230  C    ALA A 161      25.038  58.460  40.805  1.00 18.95           C
ATOM   1231  O    ALA A 161      25.744  58.546  41.823  1.00 19.16           O
ATOM   1232  CB   ALA A 161      26.303  57.506  38.793  1.00 18.28           C
ATOM   1233  N    LEU A 162      24.151  59.393  40.475  1.00 16.82           N
ATOM   1234  CA   LEU A 162      23.968  60.552  41.326  1.00 15.80           C
ATOM   1235  C    LEU A 162      23.173  60.148  42.582  1.00 16.03           C
ATOM   1236  O    LEU A 162      23.398  60.700  43.648  1.00 16.56           O
ATOM   1237  CB   LEU A 162      23.251  61.664  40.569  1.00 17.58           C
ATOM   1238  CG   LEU A 162      24.061  62.110  39.358  1.00 20.43           C
ATOM   1239  CD1  LEU A 162      23.306  63.220  38.640  1.00 19.05           C
ATOM   1240  CD2  LEU A 162      25.470  62.568  39.824  1.00 20.91           C
ATOM   1241  N    ASN A 163      22.248  59.191  42.473  1.00 15.54           N
ATOM   1242  CA   ASN A 163      21.508  58.776  43.661  1.00 15.05           C
ATOM   1243  C    ASN A 163      22.460  58.023  44.571  1.00 15.21           C
ATOM   1244  O    ASN A 163      22.395  58.148  45.804  1.00 15.56           O
ATOM   1245  CB   ASN A 163      20.318  57.871  43.305  1.00 16.64           C
ATOM   1246  CG   ASN A 163      19.284  58.574  42.462  1.00 15.79           C
ATOM   1247  OD1  ASN A 163      18.294  59.149  42.994  1.00 18.59           O
ATOM   1248  ND2  ASN A 163      19.482  58.546  41.149  1.00 13.48           N
ATOM   1249  N    VAL A 164      23.363  57.252  43.963  1.00 14.76           N
ATOM   1250  CA   VAL A 164      24.363  56.493  44.721  1.00 17.08           C
ATOM   1251  C    VAL A 164      25.215  57.482  45.487  1.00 18.01           C
ATOM   1252  O    VAL A 164      25.464  57.327  46.692  1.00 18.33           O
ATOM   1253  CB   VAL A 164      25.293  55.657  43.775  1.00 16.72           C
ATOM   1254  CG1  VAL A 164      26.618  55.288  44.468  1.00 18.56           C
ATOM   1255  CG2  VAL A 164      24.550  54.381  43.367  1.00 19.02           C
ATOM   1256  N    TYR A 165      25.623  58.529  44.785  1.00 17.74           N
ATOM   1257  CA   TYR A 165      26.491  59.533  45.377  1.00 18.54           C
ATOM   1258  C    TYR A 165      25.827  60.165  46.575  1.00 17.65           C
ATOM   1259  O    TYR A 165      26.413  60.251  47.654  1.00 18.52           O
ATOM   1260  CB   TYR A 165      26.846  60.589  44.318  1.00 19.29           C
ATOM   1261  CG   TYR A 165      27.765  61.694  44.827  1.00 20.19           C
ATOM   1262  CD1  TYR A 165      27.248  62.785  45.519  1.00 20.62           C
ATOM   1263  CD2  TYR A 165      29.153  61.634  44.619  1.00 21.99           C
ATOM   1264  CE1  TYR A 165      28.066  63.791  45.996  1.00 21.76           C
ATOM   1265  CE2  TYR A 165      30.007  62.666  45.101  1.00 21.07           C
ATOM   1266  CZ   TYR A 165      29.458  63.732  45.777  1.00 22.98           C
ATOM   1267  OH   TYR A 165      30.228  64.802  46.207  1.00 26.05           O
ATOM   1268  N    GLU A 166      24.586  60.574  46.410  1.00 16.62           N
ATOM   1269  CA   GLU A 166      23.900  61.218  47.504  1.00 15.04           C
ATOM   1270  C    GLU A 166      23.677  60.306  48.710  1.00 14.17           C
ATOM   1271  O    GLU A 166      23.698  60.783  49.851  1.00 12.59           O
ATOM   1272  CB   GLU A 166      22.562  61.800  47.025  1.00 13.97           C
ATOM   1273  CG   GLU A 166      22.680  63.071  46.214  1.00 15.79           C
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| ATOM | 1274 | CD  | GLU A 166 | 23.459 | 64.149 | 46.964 | 1.00 19.67 | C |
|------|------|-----|-----------|--------|--------|--------|-----------|---|
| ATOM | 1275 | OE1 | GLU A 166 | 23.062 | 64.504 | 48.102 | 1.00 19.71 | O |
| ATOM | 1276 | OE2 | GLU A 166 | 24.472 | 64.624 | 46.403 | 1.00 18.92 | O |
| ATOM | 1277 | N   | LEU A 167 | 23.484 | 59.004 | 48.472 | 1.00 16.07 | N |
| ATOM | 1278 | CA  | LEU A 167 | 23.233 | 58.089 | 49.570 | 1.00 15.15 | C |
| ATOM | 1279 | C   | LEU A 167 | 24.555 | 57.936 | 50.321 | 1.00 15.96 | C |
| ATOM | 1280 | O   | LEU A 167 | 24.598 | 58.046 | 51.552 | 1.00 14.04 | O |
| ATOM | 1281 | CB  | LEU A 167 | 22.688 | 56.738 | 49.056 | 1.00 12.67 | C |
| ATOM | 1282 | CG  | LEU A 167 | 22.505 | 55.621 | 50.096 | 1.00 12.36 | C |
| ATOM | 1283 | CD1 | LEU A 167 | 21.650 | 56.121 | 51.337 | 1.00 15.24 | C |
| ATOM | 1284 | CD2 | LEU A 167 | 21.873 | 54.392 | 49.412 | 1.00 13.26 | C |
| ATOM | 1285 | N   | GLN A 168 | 25.647 | 57.702 | 49.582 | 1.00 16.31 | N |
| ATOM | 1286 | CA  | GLN A 168 | 26.939 | 57.609 | 50.271 | 1.00 16.16 | C |
| ATOM | 1287 | C   | GLN A 168 | 27.238 | 58.888 | 51.068 | 1.00 14.00 | C |
| ATOM | 1288 | O   | GLN A 168 | 27.676 | 58.795 | 52.210 | 1.00 15.64 | O |
| ATOM | 1289 | CB  | GLN A 168 | 28.089 | 57.366 | 49.286 | 1.00 17.45 | C |
| ATOM | 1290 | CG  | GLN A 168 | 29.430 | 57.349 | 49.965 | 1.00 20.43 | C |
| ATOM | 1291 | CD  | GLN A 168 | 29.800 | 55.990 | 50.485 | 1.00 21.48 | C |
| ATOM | 1292 | OE1 | GLN A 168 | 29.057 | 55.377 | 51.230 | 1.00 21.98 | O |
| ATOM | 1293 | NE2 | GLN A 168 | 30.964 | 55.504 | 50.087 | 1.00 21.09 | N |
| ATOM | 1294 | N   | LYS A 169 | 27.030 | 60.081 | 50.499 | 1.00 16.58 | N |
| ATOM | 1295 | CA  | LYS A 169 | 27.289 | 61.324 | 51.229 | 1.00 14.85 | C |
| ATOM | 1296 | C   | LYS A 169 | 26.415 | 61.392 | 52.498 | 1.00 15.77 | C |
| ATOM | 1297 | O   | LYS A 169 | 26.868 | 61.758 | 53.578 | 1.00 13.40 | O |
| ATOM | 1298 | CB  | LYS A 169 | 27.057 | 62.557 | 50.328 | 1.00 15.20 | C |
| ATOM | 1299 | CG  | LYS A 169 | 27.014 | 63.901 | 51.052 | 1.00 15.06 | C |
| ATOM | 1300 | CD  | LYS A 169 | 26.823 | 65.015 | 50.060 | 1.00 16.54 | C |
| ATOM | 1301 | CE  | LYS A 169 | 26.401 | 66.324 | 50.662 | 1.00 20.08 | C |
| ATOM | 1302 | NZ  | LYS A 169 | 26.425 | 67.385 | 49.601 | 1.00 22.28 | N |
| ATOM | 1303 | N   | ALA A 170 | 25.153 | 61.010 | 52.384 | 1.00 14.77 | N |
| ATOM | 1304 | CA  | ALA A 170 | 24.273 | 61.039 | 53.550 | 1.00 14.45 | C |
| ATOM | 1305 | C   | ALA A 170 | 24.683 | 59.995 | 54.618 | 1.00 15.20 | C |
| ATOM | 1306 | O   | ALA A 170 | 24.547 | 60.228 | 55.854 | 1.00 16.14 | O |
| ATOM | 1307 | CB  | ALA A 170 | 22.819 | 60.802 | 53.061 | 1.00 13.71 | C |
| ATOM | 1308 | N   | LEU A 171 | 25.189 | 58.841 | 54.175 | 1.00 16.62 | N |
| ATOM | 1309 | CA  | LEU A 171 | 25.617 | 57.808 | 55.116 | 1.00 15.24 | C |
| ATOM | 1310 | C   | LEU A 171 | 26.817 | 58.330 | 55.878 | 1.00 17.13 | C |
| ATOM | 1311 | O   | LEU A 171 | 26.949 | 58.108 | 57.072 | 1.00 17.58 | O |
| ATOM | 1312 | CB  | LEU A 171 | 25.995 | 56.499 | 54.406 | 1.00 14.58 | C |
| ATOM | 1313 | CG  | LEU A 171 | 24.826 | 55.669 | 53.854 | 1.00 12.54 | C |
| ATOM | 1314 | CD1 | LEU A 171 | 25.408 | 54.553 | 52.932 | 1.00 14.00 | C |
| ATOM | 1315 | CD2 | LEU A 171 | 24.013 | 55.067 | 55.024 | 1.00 12.54 | C |
| ATOM | 1316 | N   | ILE A 172 | 27.694 | 59.013 | 55.167 | 1.00 16.59 | N |
| ATOM | 1317 | CA  | ILE A 172 | 28.893 | 59.594 | 55.768 | 1.00 17.28 | C |
| ATOM | 1318 | C   | ILE A 172 | 28.537 | 60.689 | 56.772 | 1.00 16.52 | C |
| ATOM | 1319 | O   | ILE A 172 | 29.030 | 60.693 | 57.898 | 1.00 16.43 | O |
| ATOM | 1320 | CB  | ILE A 172 | 29.814 | 60.132 | 54.630 | 1.00 17.32 | C |
| ATOM | 1321 | CG1 | ILE A 172 | 30.473 | 58.951 | 53.941 | 1.00 17.69 | C |
| ATOM | 1322 | CG2 | ILE A 172 | 30.909 | 61.083 | 55.162 | 1.00 15.45 | C |
| ATOM | 1323 | CD1 | ILE A 172 | 31.179 | 59.343 | 52.612 | 1.00 13.64 | C |
| ATOM | 1324 | N   | ALA A 173 | 27.662 | 61.617 | 56.375 | 1.00 16.06 | N |
| ATOM | 1325 | CA  | ALA A 173 | 27.285 | 62.683 | 57.273 | 1.00 16.52 | C |
| ATOM | 1326 | C   | ALA A 173 | 26.768 | 62.082 | 58.572 | 1.00 17.25 | C |
| ATOM | 1327 | O   | ALA A 173 | 26.984 | 62.645 | 59.646 | 1.00 17.68 | O |
| ATOM | 1328 | CB  | ALA A 173 | 26.240 | 63.572 | 56.640 | 1.00 17.55 | C |
| ATOM | 1329 | N   | ALA A 174 | 26.142 | 60.908 | 58.478 | 1.00 15.09 | N |
| ATOM | 1330 | CA  | ALA A 174 | 25.574 | 60.250 | 59.637 | 1.00 16.28 | C |
| ATOM | 1331 | C   | ALA A 174 | 26.573 | 59.476 | 60.455 | 1.00 15.01 | C |
| ATOM | 1332 | O   | ALA A 174 | 26.247 | 59.054 | 61.565 | 1.00 15.30 | O |
| ATOM | 1333 | CB  | ALA A 174 | 24.409 | 59.333 | 59.221 | 1.00 14.05 | C |
| ATOM | 1334 | N   | GLY A 175 | 27.777 | 59.260 | 59.903 | 1.00 16.88 | N |
| ATOM | 1335 | CA  | GLY A 175 | 28.815 | 58.582 | 60.656 | 1.00 16.13 | C |
| ATOM | 1336 | C   | GLY A 175 | 29.091 | 57.145 | 60.307 | 1.00 16.49 | C |
| ATOM | 1337 | O   | GLY A 175 | 29.594 | 56.377 | 61.128 | 1.00 18.01 | O |
| ATOM | 1338 | N   | VAL A 176 | 28.782 | 56.752 | 59.081 | 1.00 18.02 | N |
| ATOM | 1339 | CA  | VAL A 176 | 29.005 | 55.358 | 58.689 | 1.00 14.49 | C |
| ATOM | 1340 | C   | VAL A 176 | 30.484 | 55.054 | 58.513 | 1.00 16.35 | C |
| ATOM | 1341 | O   | VAL A 176 | 31.232 | 55.930 | 58.158 | 1.00 17.97 | O |
| ATOM | 1342 | CB  | VAL A 176 | 28.248 | 55.030 | 57.346 | 1.00 14.59 | C |
| ATOM | 1343 | CG1 | VAL A 176 | 29.105 | 55.322 | 56.116 | 1.00 14.01 | C |
| ATOM | 1344 | CG2 | VAL A 176 | 27.765 | 53.602 | 57.365 | 1.00 14.57 | C |
| ATOM | 1345 | N   | ALA A 177 | 30.863 | 53.797 | 58.751 | 1.00 18.38 | N |
| ATOM | 1346 | CA  | ALA A 177 | 32.246 | 53.318 | 58.583 | 1.00 19.16 | C |
| ATOM | 1347 | C   | ALA A 177 | 32.431 | 52.623 | 57.222 | 1.00 20.75 | C |
| ATOM | 1348 | O   | ALA A 177 | 33.471 | 52.798 | 56.558 | 1.00 21.85 | O |
| ATOM | 1349 | CB  | ALA A 177 | 32.590 | 52.347 | 59.693 | 1.00 15.86 | C |
| ATOM | 1350 | N   | GLY A 178 | 31.432 | 51.824 | 56.826 | 1.00 19.34 | N |
| ATOM | 1351 | CA  | GLY A 178 | 31.496 | 51.124 | 55.554 | 1.00 19.74 | C |
| ATOM | 1352 | C   | GLY A 178 | 30.122 | 51.032 | 54.890 | 1.00 20.61 | C |
| ATOM | 1353 | O   | GLY A 178 | 29.109 | 51.136 | 55.571 | 1.00 16.64 | O |

| ATOM | 1354 | N | SER A 179 | 30.105 | 50.831 | 53.575 | 1.00 | 18.99 | N |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1355 | CA | SER A 179 | 28.850 | 50.744 | 52.839 | 1.00 | 20.32 | C |
| ATOM | 1356 | C | SER A 179 | 28.959 | 49.748 | 51.707 | 1.00 | 20.73 | C |
| ATOM | 1357 | O | SER A 179 | 30.016 | 49.635 | 51.061 | 1.00 | 20.97 | O |
| ATOM | 1358 | CB | SER A 179 | 28.450 | 52.132 | 52.307 | 1.00 | 18.40 | C |
| ATOM | 1359 | OG | SER A 179 | 29.380 | 52.733 | 51.417 | 1.00 | 17.51 | O |
| ATOM | 1360 | N | HIS A 180 | 27.884 | 49.006 | 51.487 | 1.00 | 19.47 | N |
| ATOM | 1361 | CA | HIS A 180 | 27.846 | 48.040 | 50.415 | 1.00 | 19.64 | C |
| ATOM | 1362 | C | HIS A 180 | 26.833 | 48.370 | 49.343 | 1.00 | 20.65 | C |
| ATOM | 1363 | O | HIS A 180 | 25.777 | 48.969 | 49.610 | 1.00 | 19.45 | O |
| ATOM | 1364 | CB | HIS A 180 | 27.652 | 46.636 | 50.952 | 1.00 | 19.34 | C |
| ATOM | 1365 | CG | HIS A 180 | 26.346 | 46.386 | 51.639 | 1.00 | 18.84 | C |
| ATOM | 1366 | ND1 | HIS A 180 | 25.187 | 46.102 | 50.944 | 1.00 | 19.39 | N |
| ATOM | 1367 | CD2 | HIS A 180 | 26.068 | 46.128 | 52.942 | 1.00 | 19.60 | C |
| ATOM | 1368 | CE1 | HIS A 180 | 24.266 | 45.658 | 51.783 | 1.00 | 17.97 | C |
| ATOM | 1369 | NE2 | HIS A 180 | 24.780 | 45.657 | 53.003 | 1.00 | 20.72 | N |
| ATOM | 1370 | N | TRP A 181 | 27.169 | 47.943 | 48.130 | 1.00 | 18.53 | N |
| ATOM | 1371 | CA | TRP A 181 | 26.403 | 48.290 | 46.951 | 1.00 | 20.07 | C |
| ATOM | 1372 | C | TRP A 181 | 26.277 | 47.087 | 46.053 | 1.00 | 20.73 | C |
| ATOM | 1373 | O | TRP A 181 | 27.282 | 46.408 | 45.776 | 1.00 | 22.09 | O |
| ATOM | 1374 | CB | TRP A 181 | 27.155 | 49.426 | 46.231 | 1.00 | 16.93 | C |
| ATOM | 1375 | CG | TRP A 181 | 27.512 | 50.526 | 47.178 | 1.00 | 19.31 | C |
| ATOM | 1376 | CD1 | TRP A 181 | 28.586 | 50.577 | 48.022 | 1.00 | 18.41 | C |
| ATOM | 1377 | CD2 | TRP A 181 | 26.727 | 51.696 | 47.454 | 1.00 | 16.77 | C |
| ATOM | 1378 | NE1 | TRP A 181 | 28.514 | 51.713 | 48.818 | 1.00 | 17.99 | N |
| ATOM | 1379 | CE2 | TRP A 181 | 27.377 | 52.409 | 48.481 | 1.00 | 18.80 | C |
| ATOM | 1380 | CE3 | TRP A 181 | 25.522 | 52.207 | 46.927 | 1.00 | 19.02 | C |
| ATOM | 1381 | CZ2 | TRP A 181 | 26.874 | 53.607 | 49.004 | 1.00 | 18.06 | C |
| ATOM | 1382 | CZ3 | TRP A 181 | 25.023 | 53.402 | 47.443 | 1.00 | 14.15 | C |
| ATOM | 1383 | CH2 | TRP A 181 | 25.698 | 54.087 | 48.474 | 1.00 | 18.46 | C |
| ATOM | 1384 | N | GLU A 182 | 25.063 | 46.827 | 45.554 | 1.00 | 19.00 | N |
| ATOM | 1385 | CA | GLU A 182 | 24.888 | 45.641 | 44.712 | 1.00 | 19.86 | C |
| ATOM | 1386 | C | GLU A 182 | 24.600 | 45.914 | 43.242 | 1.00 | 19.25 | C |
| ATOM | 1387 | O | GLU A 182 | 24.062 | 46.986 | 42.858 | 1.00 | 18.67 | O |
| ATOM | 1388 | CB | GLU A 182 | 23.778 | 44.773 | 45.284 | 1.00 | 20.47 | C |
| ATOM | 1389 | CG | GLU A 182 | 22.440 | 45.474 | 45.201 | 1.00 | 20.24 | C |
| ATOM | 1390 | CD | GLU A 182 | 21.599 | 45.278 | 46.434 | 1.00 | 24.89 | C |
| ATOM | 1391 | OE1 | GLU A 182 | 22.169 | 45.032 | 47.526 | 1.00 | 23.61 | O |
| ATOM | 1392 | OE2 | GLU A 182 | 20.368 | 45.393 | 46.310 | 1.00 | 24.82 | O |
| ATOM | 1393 | N | ASP A 183 | 24.917 | 44.908 | 42.430 | 1.00 | 19.39 | N |
| ATOM | 1394 | CA | ASP A 183 | 24.738 | 45.014 | 41.000 | 1.00 | 19.26 | C |
| ATOM | 1395 | C | ASP A 183 | 23.350 | 44.659 | 40.506 | 1.00 | 20.55 | C |
| ATOM | 1396 | O | ASP A 183 | 23.206 | 43.894 | 39.575 | 1.00 | 20.57 | O |
| ATOM | 1397 | CB | ASP A 183 | 25.832 | 44.223 | 40.233 | 1.00 | 19.59 | C |
| ATOM | 1398 | CG | ASP A 183 | 25.930 | 42.735 | 40.626 | 1.00 | 19.25 | C |
| ATOM | 1399 | OD1 | ASP A 183 | 25.078 | 42.161 | 41.346 | 1.00 | 21.45 | O |
| ATOM | 1400 | OD2 | ASP A 183 | 26.906 | 42.095 | 40.149 | 1.00 | 24.59 | O |
| ATOM | 1401 | N | GLN A 184 | 22.332 | 45.265 | 41.126 | 1.00 | 18.10 | N |
| ATOM | 1402 | CA | GLN A 184 | 20.958 | 45.027 | 40.714 | 1.00 | 19.18 | C |
| ATOM | 1403 | C | GLN A 184 | 20.321 | 46.271 | 40.112 | 1.00 | 18.85 | C |
| ATOM | 1404 | O | GLN A 184 | 20.766 | 47.410 | 40.342 | 1.00 | 19.32 | O |
| ATOM | 1405 | CB | GLN A 184 | 20.107 | 44.562 | 41.898 | 1.00 | 18.79 | C |
| ATOM | 1406 | CG | GLN A 184 | 20.399 | 43.177 | 42.431 | 1.00 | 20.87 | C |
| ATOM | 1407 | CD | GLN A 184 | 19.405 | 42.778 | 43.518 | 1.00 | 21.02 | C |
| ATOM | 1408 | OE1 | GLN A 184 | 18.199 | 42.685 | 43.270 | 1.00 | 17.30 | O |
| ATOM | 1409 | NE2 | GLN A 184 | 19.910 | 42.541 | 44.726 | 1.00 | 20.14 | N |
| ATOM | 1410 | N | LEU A 185 | 19.274 | 46.054 | 39.323 | 1.00 | 18.41 | N |
| ATOM | 1411 | CA | LEU A 185 | 18.518 | 47.181 | 38.729 | 1.00 | 18.66 | C |
| ATOM | 1412 | C | LEU A 185 | 17.775 | 47.787 | 39.908 | 1.00 | 17.79 | C |
| ATOM | 1413 | O | LEU A 185 | 16.944 | 47.119 | 40.505 | 1.00 | 17.90 | O |
| ATOM | 1414 | CB | LEU A 185 | 17.497 | 46.673 | 37.708 | 1.00 | 17.73 | C |
| ATOM | 1415 | CG | LEU A 185 | 16.561 | 47.742 | 37.104 | 1.00 | 18.77 | C |
| ATOM | 1416 | CD1 | LEU A 185 | 17.353 | 48.796 | 36.323 | 1.00 | 18.36 | C |
| ATOM | 1417 | CD2 | LEU A 185 | 15.583 | 47.087 | 36.201 | 1.00 | 18.81 | C |
| ATOM | 1418 | N | ALA A 186 | 18.059 | 49.045 | 40.240 | 1.00 | 17.53 | N |
| ATOM | 1419 | CA | ALA A 186 | 17.446 | 49.687 | 41.420 | 1.00 | 18.71 | C |
| ATOM | 1420 | C | ALA A 186 | 15.922 | 49.559 | 41.478 | 1.00 | 18.80 | C |
| ATOM | 1421 | O | ALA A 186 | 15.365 | 49.191 | 42.506 | 1.00 | 20.21 | O |
| ATOM | 1422 | CB | ALA A 186 | 17.845 | 51.160 | 41.476 | 1.00 | 20.85 | C |
| ATOM | 1423 | N | SER A 187 | 15.271 | 49.828 | 40.351 | 1.00 | 18.65 | N |
| ATOM | 1424 | CA | SER A 187 | 13.813 | 49.748 | 40.256 | 1.00 | 17.80 | C |
| ATOM | 1425 | C | SER A 187 | 13.212 | 48.344 | 40.415 | 1.00 | 17.59 | C |
| ATOM | 1426 | O | SER A 187 | 12.002 | 48.207 | 40.567 | 1.00 | 18.45 | O |
| ATOM | 1427 | CB | SER A 187 | 13.371 | 50.370 | 38.932 | 1.00 | 16.86 | C |
| ATOM | 1428 | OG | SER A 187 | 13.709 | 49.572 | 37.832 | 1.00 | 17.56 | O |
| ATOM | 1429 | N | GLU A 188 | 14.050 | 47.307 | 40.410 | 1.00 | 15.87 | N |
| ATOM | 1430 | CA | GLU A 188 | 13.564 | 45.938 | 40.605 | 1.00 | 18.22 | C |
| ATOM | 1431 | C | GLU A 188 | 14.372 | 45.231 | 41.702 | 1.00 | 17.82 | C |
| ATOM | 1432 | O | GLU A 188 | 14.369 | 43.999 | 41.795 | 1.00 | 16.62 | O |
| ATOM | 1433 | CB | GLU A 188 | 13.654 | 45.153 | 39.288 | 1.00 | 19.27 | C |

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ATOM   1434  CG   GLU A 188    12.754  45.703  38.163  1.00 18.86           C
ATOM   1435  CD   GLU A 188    11.258  45.674  38.530  1.00 22.14           C
ATOM   1436  OE1  GLU A 188    10.873  44.883  39.419  1.00 19.99           O
ATOM   1437  OE2  GLU A 188    10.472  46.445  37.939  1.00 23.41           O
ATOM   1438  N    LYS A 189    15.036  46.018  42.547  1.00 18.72           N
ATOM   1439  CA   LYS A 189    15.881  45.455  43.609  1.00 18.80           C
ATOM   1440  C    LYS A 189    15.184  44.433  44.472  1.00 17.74           C
ATOM   1441  O    LYS A 189    14.009  44.580  44.805  1.00 18.22           O
ATOM   1442  CB   LYS A 189    16.444  46.585  44.500  1.00 17.60           C
ATOM   1443  CG   LYS A 189    17.357  46.114  45.676  1.00 19.57           C
ATOM   1444  CD   LYS A 189    16.527  45.732  46.923  1.00 21.09           C
ATOM   1445  CE   LYS A 189    17.345  45.752  48.233  1.00 21.46           C
ATOM   1446  NZ   LYS A 189    18.407  44.690  48.224  1.00 21.16           N
ATOM   1447  N    LYS A 190    15.920  43.391  44.862  1.00 17.89           N
ATOM   1448  CA   LYS A 190    15.378  42.343  45.714  1.00 17.00           C
ATOM   1449  C    LYS A 190    16.370  41.922  46.781  1.00 18.98           C
ATOM   1450  O    LYS A 190    17.577  42.057  46.613  1.00 19.69           O
ATOM   1451  CB   LYS A 190    15.106  41.049  44.929  1.00 17.64           C
ATOM   1452  CG   LYS A 190    14.117  41.135  43.766  1.00 16.06           C
ATOM   1453  CD   LYS A 190    12.746  41.500  44.298  1.00 12.86           C
ATOM   1454  CE   LYS A 190    11.736  41.362  43.161  1.00 14.80           C
ATOM   1455  NZ   LYS A 190    12.121  42.151  41.929  1.00 14.44           N
ATOM   1456  N    CYS A 191    15.825  41.414  47.879  1.00 19.52           N
ATOM   1457  CA   CYS A 191    16.625  40.801  48.934  1.00 20.96           C
ATOM   1458  C    CYS A 191    17.401  39.734  48.118  1.00 21.37           C
ATOM   1459  O    CYS A 191    16.816  39.101  47.215  1.00 20.72           O
ATOM   1460  CB   CYS A 191    15.685  40.089  49.911  1.00 21.83           C
ATOM   1461  SG   CYS A 191    16.463  38.738  50.824  1.00 21.74           S
ATOM   1462  N    GLY A 192    18.687  39.547  48.403  1.00 20.65           N
ATOM   1463  CA   GLY A 192    19.440  38.521  47.676  1.00 20.67           C
ATOM   1464  C    GLY A 192    18.827  37.113  47.669  1.00 20.40           C
ATOM   1465  O    GLY A 192    19.168  36.257  46.811  1.00 20.34           O
ATOM   1466  N    HIS A 193    17.916  36.857  48.597  1.00 20.24           N
ATOM   1467  CA   HIS A 193    17.288  35.540  48.687  1.00 20.37           C
ATOM   1468  C    HIS A 193    15.843  35.503  48.227  1.00 20.90           C
ATOM   1469  O    HIS A 193    15.128  34.531  48.435  1.00 19.59           O
ATOM   1470  CB   HIS A 193    17.479  35.000  50.095  1.00 23.05           C
ATOM   1471  CG   HIS A 193    18.922  34.876  50.455  1.00 23.99           C
ATOM   1472  ND1  HIS A 193    19.532  35.688  51.387  1.00 23.54           N
ATOM   1473  CD2  HIS A 193    19.914  34.139  49.888  1.00 24.24           C
ATOM   1474  CE1  HIS A 193    20.838  35.464  51.373  1.00 24.63           C
ATOM   1475  NE2  HIS A 193    21.094  34.533  50.469  1.00 23.54           N
ATOM   1476  N    LEU A 194    15.411  36.591  47.587  1.00 19.73           N
ATOM   1477  CA   LEU A 194    14.071  36.625  46.987  1.00 19.17           C
ATOM   1478  C    LEU A 194    14.277  36.328  45.492  1.00 19.15           C
ATOM   1479  O    LEU A 194    15.397  36.423  44.989  1.00 18.96           O
ATOM   1480  CB   LEU A 194    13.432  37.996  47.179  1.00 17.26           C
ATOM   1481  CG   LEU A 194    12.847  38.238  48.587  1.00 15.69           C
ATOM   1482  CD1  LEU A 194    12.260  39.674  48.663  1.00 14.28           C
ATOM   1483  CD2  LEU A 194    11.759  37.273  48.874  1.00 14.82           C
ATOM   1484  N    GLY A 195    13.224  35.936  44.786  1.00 19.46           N
ATOM   1485  CA   GLY A 195    13.375  35.689  43.354  1.00 18.52           C
ATOM   1486  C    GLY A 195    13.128  36.974  42.576  1.00 19.84           C
ATOM   1487  O    GLY A 195    12.972  38.041  43.192  1.00 15.96           O
ATOM   1488  N    GLY A 196    13.108  36.885  41.242  1.00 19.99           N
ATOM   1489  CA   GLY A 196    12.854  38.063  40.414  1.00 21.58           C
ATOM   1490  C    GLY A 196    13.934  39.129  40.375  1.00 20.83           C
ATOM   1491  O    GLY A 196    13.650  40.324  40.181  1.00 21.59           O
ATOM   1492  N    LYS A 197    15.182  38.718  40.550  1.00 21.36           N
ATOM   1493  CA   LYS A 197    16.290  39.669  40.532  1.00 18.26           C
ATOM   1494  C    LYS A 197    16.768  39.994  39.127  1.00 17.76           C
ATOM   1495  O    LYS A 197    16.721  39.152  38.224  1.00 19.09           O
ATOM   1496  CB   LYS A 197    17.452  39.125  41.374  1.00 18.66           C
ATOM   1497  CG   LYS A 197    17.108  38.931  42.886  1.00 17.09           C
ATOM   1498  CD   LYS A 197    18.353  38.812  43.786  1.00 18.95           C
ATOM   1499  CE   LYS A 197    19.286  37.682  43.371  1.00 18.98           C
ATOM   1500  NZ   LYS A 197    20.276  37.425  44.482  1.00 17.94           N
ATOM   1501  N    VAL A 198    17.233  41.222  38.935  1.00 16.93           N
ATOM   1502  CA   VAL A 198    17.708  41.685  37.630  1.00 16.38           C
ATOM   1503  C    VAL A 198    19.043  42.377  37.790  1.00 16.85           C
ATOM   1504  O    VAL A 198    19.123  43.408  38.458  1.00 16.34           O
ATOM   1505  CB   VAL A 198    16.733  42.726  36.987  1.00 16.23           C
ATOM   1506  CG1  VAL A 198    17.216  43.132  35.605  1.00 16.06           C
ATOM   1507  CG2  VAL A 198    15.307  42.128  36.898  1.00 17.04           C
ATOM   1508  N    LEU A 199    20.085  41.825  37.170  1.00 17.02           N
ATOM   1509  CA   LEU A 199    21.427  42.431  37.225  1.00 17.54           C
ATOM   1510  C    LEU A 199    21.554  43.611  36.283  1.00 18.12           C
ATOM   1511  O    LEU A 199    20.795  43.729  35.305  1.00 19.11           O
ATOM   1512  CB   LEU A 199    22.489  41.409  36.788  1.00 16.37           C
ATOM   1513  CG   LEU A 199    22.543  40.074  37.511  1.00 15.32           C
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| ATOM | 1514 | CD1 | LEU A 199 | 23.648 | 39.221 | 36.873 | 1.00 | 17.54 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1515 | CD2 | LEU A 199 | 22.833 | 40.272 | 38.973 | 1.00 | 13.95 | C |
| ATOM | 1516 | N | ILE A 200 | 22.504 | 44.504 | 36.566 | 1.00 | 19.13 | N |
| ATOM | 1517 | CA | ILE A 200 | 22.780 | 45.599 | 35.655 | 1.00 | 20.04 | C |
| ATOM | 1518 | C | ILE A 200 | 24.141 | 45.205 | 35.035 | 1.00 | 20.70 | C |
| ATOM | 1519 | O | ILE A 200 | 24.802 | 44.283 | 35.538 | 1.00 | 19.65 | O |
| ATOM | 1520 | CB | ILE A 200 | 22.786 | 46.999 | 36.351 | 1.00 | 19.61 | C |
| ATOM | 1521 | CG1 | ILE A 200 | 23.332 | 46.943 | 37.768 | 1.00 | 19.12 | C |
| ATOM | 1522 | CG2 | ILE A 200 | 21.368 | 47.494 | 36.472 | 1.00 | 20.85 | C |
| ATOM | 1523 | CD1 | ILE A 200 | 24.775 | 46.761 | 37.844 | 1.00 | 24.59 | C |
| ATOM | 1524 | N | PRO A 201 | 24.538 | 45.834 | 33.915 | 1.00 | 21.65 | N |
| ATOM | 1525 | CA | PRO A 201 | 25.827 | 45.484 | 33.267 | 1.00 | 22.34 | C |
| ATOM | 1526 | C | PRO A 201 | 27.035 | 45.649 | 34.207 | 1.00 | 22.68 | C |
| ATOM | 1527 | O | PRO A 201 | 27.024 | 46.470 | 35.107 | 1.00 | 21.55 | O |
| ATOM | 1528 | CB | PRO A 201 | 25.910 | 46.448 | 32.091 | 1.00 | 22.54 | C |
| ATOM | 1529 | CG | PRO A 201 | 24.455 | 46.777 | 31.788 | 1.00 | 23.63 | C |
| ATOM | 1530 | CD | PRO A 201 | 23.828 | 46.887 | 33.164 | 1.00 | 21.59 | C |
| ATOM | 1531 | N | THR A 202 | 28.073 | 44.853 | 33.990 | 1.00 | 23.68 | N |
| ATOM | 1532 | CA | THR A 202 | 29.278 | 44.954 | 34.813 | 1.00 | 22.13 | C |
| ATOM | 1533 | C | THR A 202 | 29.797 | 46.408 | 34.921 | 1.00 | 22.19 | C |
| ATOM | 1534 | O | THR A 202 | 30.124 | 46.881 | 36.018 | 1.00 | 21.42 | O |
| ATOM | 1535 | CB | THR A 202 | 30.431 | 44.023 | 34.240 | 1.00 | 21.39 | C |
| ATOM | 1536 | OG1 | THR A 202 | 30.106 | 42.645 | 34.481 | 1.00 | 20.86 | O |
| ATOM | 1537 | CG2 | THR A 202 | 31.785 | 44.340 | 34.914 | 1.00 | 22.17 | C |
| ATOM | 1538 | N | GLN A 203 | 29.883 | 47.128 | 33.804 | 1.00 | 22.14 | N |
| ATOM | 1539 | CA | GLN A 203 | 30.393 | 48.488 | 33.853 | 1.00 | 22.31 | C |
| ATOM | 1540 | C | GLN A 203 | 29.465 | 49.447 | 34.608 | 1.00 | 22.81 | C |
| ATOM | 1541 | O | GLN A 203 | 29.904 | 50.478 | 35.182 | 1.00 | 21.16 | O |
| ATOM | 1542 | CB | GLN A 203 | 30.650 | 48.999 | 32.442 | 1.00 | 22.94 | C |
| ATOM | 1543 | CG | GLN A 203 | 31.273 | 50.374 | 32.389 | 1.00 | 25.05 | C |
| ATOM | 1544 | CD | GLN A 203 | 32.661 | 50.434 | 33.064 | 1.00 | 26.87 | C |
| ATOM | 1545 | OE1 | GLN A 203 | 33.367 | 49.421 | 33.160 | 1.00 | 25.51 | O |
| ATOM | 1546 | NE2 | GLN A 203 | 33.052 | 51.633 | 33.509 | 1.00 | 28.31 | N |
| ATOM | 1547 | N | GLN A 204 | 28.174 | 49.132 | 34.617 | 1.00 | 21.27 | N |
| ATOM | 1548 | CA | GLN A 204 | 27.278 | 50.011 | 35.348 | 1.00 | 20.75 | C |
| ATOM | 1549 | C | GLN A 204 | 27.600 | 49.885 | 36.835 | 1.00 | 20.03 | C |
| ATOM | 1550 | O | GLN A 204 | 27.612 | 50.897 | 37.532 | 1.00 | 19.81 | O |
| ATOM | 1551 | CB | GLN A 204 | 25.788 | 49.686 | 35.077 | 1.00 | 22.43 | C |
| ATOM | 1552 | CG | GLN A 204 | 24.815 | 50.754 | 35.626 | 1.00 | 23.52 | C |
| ATOM | 1553 | CD | GLN A 204 | 23.356 | 50.547 | 35.172 | 1.00 | 24.69 | C |
| ATOM | 1554 | OE1 | GLN A 204 | 23.084 | 50.189 | 34.021 | 1.00 | 25.18 | O |
| ATOM | 1555 | NE2 | GLN A 204 | 22.423 | 50.791 | 36.074 | 1.00 | 26.41 | N |
| ATOM | 1556 | N | HIS A 205 | 27.874 | 48.679 | 37.336 | 1.00 | 21.64 | N |
| ATOM | 1557 | CA | HIS A 205 | 28.202 | 48.599 | 38.756 | 1.00 | 21.39 | C |
| ATOM | 1558 | C | HIS A 205 | 29.562 | 49.219 | 39.050 | 1.00 | 23.16 | C |
| ATOM | 1559 | O | HIS A 205 | 29.770 | 49.752 | 40.145 | 1.00 | 23.04 | O |
| ATOM | 1560 | CB | HIS A 205 | 28.167 | 47.175 | 39.318 | 1.00 | 21.68 | C |
| ATOM | 1561 | CG | HIS A 205 | 27.935 | 47.150 | 40.793 | 1.00 | 20.38 | C |
| ATOM | 1562 | ND1 | HIS A 205 | 28.661 | 46.362 | 41.660 | 1.00 | 23.39 | N |
| ATOM | 1563 | CD2 | HIS A 205 | 27.091 | 47.877 | 41.558 | 1.00 | 20.49 | C |
| ATOM | 1564 | CE1 | HIS A 205 | 28.275 | 46.613 | 42.902 | 1.00 | 20.18 | C |
| ATOM | 1565 | NE2 | HIS A 205 | 27.325 | 47.529 | 42.866 | 1.00 | 24.25 | N |
| ATOM | 1566 | N | ILE A 206 | 30.488 | 49.165 | 38.093 | 1.00 | 22.85 | N |
| ATOM | 1567 | CA | ILE A 206 | 31.765 | 49.813 | 38.319 | 1.00 | 22.71 | C |
| ATOM | 1568 | C | ILE A 206 | 31.463 | 51.305 | 38.465 | 1.00 | 21.88 | C |
| ATOM | 1569 | O | ILE A 206 | 32.055 | 51.967 | 39.302 | 1.00 | 24.75 | O |
| ATOM | 1570 | CB | ILE A 206 | 32.786 | 49.511 | 37.149 | 1.00 | 23.00 | C |
| ATOM | 1571 | CG1 | ILE A 206 | 33.416 | 48.131 | 37.362 | 1.00 | 22.79 | C |
| ATOM | 1572 | CG2 | ILE A 206 | 33.876 | 50.566 | 37.094 | 1.00 | 23.32 | C |
| ATOM | 1573 | CD1 | ILE A 206 | 34.099 | 47.473 | 36.143 | 1.00 | 24.40 | C |
| ATOM | 1574 | N | ARG A 207 | 30.523 | 51.852 | 37.702 | 1.00 | 21.70 | N |
| ATOM | 1575 | CA | ARG A 207 | 30.206 | 53.270 | 37.861 | 1.00 | 21.67 | C |
| ATOM | 1576 | C | ARG A 207 | 29.662 | 53.502 | 39.286 | 1.00 | 19.64 | C |
| ATOM | 1577 | O | ARG A 207 | 30.000 | 54.487 | 39.924 | 1.00 | 20.85 | O |
| ATOM | 1578 | CB | ARG A 207 | 29.173 | 53.779 | 36.814 | 1.00 | 22.92 | C |
| ATOM | 1579 | CG | ARG A 207 | 29.726 | 54.001 | 35.384 | 1.00 | 26.68 | C |
| ATOM | 1580 | CD | ARG A 207 | 28.805 | 54.905 | 34.534 | 1.00 | 32.04 | C |
| ATOM | 1581 | NE | ARG A 207 | 27.630 | 54.178 | 34.031 | 1.00 | 32.56 | N |
| ATOM | 1582 | CZ | ARG A 207 | 27.694 | 53.222 | 33.106 | 1.00 | 34.52 | C |
| ATOM | 1583 | NH1 | ARG A 207 | 28.871 | 52.889 | 32.586 | 1.00 | 33.30 | N |
| ATOM | 1584 | NH2 | ARG A 207 | 26.591 | 52.596 | 32.706 | 1.00 | 32.15 | N |
| ATOM | 1585 | N | THR A 208 | 28.832 | 52.594 | 39.773 | 1.00 | 19.29 | N |
| ATOM | 1586 | CA | THR A 208 | 28.283 | 52.735 | 41.122 | 1.00 | 19.45 | C |
| ATOM | 1587 | C | THR A 208 | 29.419 | 52.789 | 42.146 | 1.00 | 18.80 | C |
| ATOM | 1588 | O | THR A 208 | 29.498 | 53.705 | 42.961 | 1.00 | 17.09 | O |
| ATOM | 1589 | CB | THR A 208 | 27.340 | 51.539 | 41.462 | 1.00 | 21.75 | C |
| ATOM | 1590 | OG1 | THR A 208 | 26.145 | 51.632 | 40.668 | 1.00 | 17.74 | O |
| ATOM | 1591 | CG2 | THR A 208 | 26.981 | 51.522 | 42.924 | 1.00 | 21.34 | C |
| ATOM | 1592 | N | LEU A 209 | 30.286 | 51.784 | 42.097 | 1.00 | 18.54 | N |
| ATOM | 1593 | CA | LEU A 209 | 31.397 | 51.736 | 43.023 | 1.00 | 20.59 | C |

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ATOM   1594  C    LEU A 209      32.314  52.972  42.933  1.00 20.37           C
ATOM   1595  O    LEU A 209      32.830  53.426  43.972  1.00 21.32           O
ATOM   1596  CB   LEU A 209      32.167  50.410  42.840  1.00 19.87           C
ATOM   1597  CG   LEU A 209      31.397  49.106  43.127  1.00 22.14           C
ATOM   1598  CD1  LEU A 209      32.127  47.912  42.539  1.00 20.30           C
ATOM   1599  CD2  LEU A 209      31.187  48.917  44.641  1.00 20.24           C
ATOM   1600  N    THR A 210      32.495  53.527  41.729  1.00 19.68           N
ATOM   1601  CA   THR A 210      33.323  54.731  41.515  1.00 19.07           C
ATOM   1602  C    THR A 210      32.612  55.941  42.152  1.00 21.72           C
ATOM   1603  O    THR A 210      33.244  56.849  42.740  1.00 21.32           O
ATOM   1604  CB   THR A 210      33.500  54.992  39.980  1.00 20.40           C
ATOM   1605  OG1  THR A 210      34.243  53.916  39.390  1.00 22.00           O
ATOM   1606  CG2  THR A 210      34.192  56.307  39.704  1.00 18.12           C
ATOM   1607  N    SER A 211      31.288  55.974  41.998  1.00 18.66           N
ATOM   1608  CA   SER A 211      30.474  57.038  42.588  1.00 19.00           C
ATOM   1609  C    SER A 211      30.588  57.021  44.147  1.00 18.05           C
ATOM   1610  O    SER A 211      30.721  58.080  44.785  1.00 21.79           O
ATOM   1611  CB   SER A 211      28.992  56.861  42.156  1.00 18.65           C
ATOM   1612  OG   SER A 211      28.210  58.023  42.472  1.00 20.46           O
ATOM   1613  N    ALA A 212      30.472  55.838  44.743  1.00 19.99           N
ATOM   1614  CA   ALA A 212      30.569  55.646  46.197  1.00 20.11           C
ATOM   1615  C    ALA A 212      31.958  56.063  46.693  1.00 21.26           C
ATOM   1616  O    ALA A 212      32.093  56.629  47.783  1.00 19.17           O
ATOM   1617  CB   ALA A 212      30.330  54.210  46.546  1.00 17.40           C
ATOM   1618  N    ARG A 213      32.994  55.758  45.903  1.00 22.12           N
ATOM   1619  CA   ARG A 213      34.335  56.176  46.304  1.00 21.31           C
ATOM   1620  C    ARG A 213      34.483  57.685  46.186  1.00 21.06           C
ATOM   1621  O    ARG A 213      35.011  58.298  47.112  1.00 22.15           O
ATOM   1622  CB   ARG A 213      35.418  55.514  45.458  1.00 23.24           C
ATOM   1623  CG   ARG A 213      36.821  55.927  45.907  1.00 24.94           C
ATOM   1624  CD   ARG A 213      37.192  55.252  47.226  1.00 24.50           C
ATOM   1625  NE   ARG A 213      37.379  53.844  46.917  1.00 26.86           N
ATOM   1626  CZ   ARG A 213      37.359  52.851  47.794  1.00 28.63           C
ATOM   1627  NH1  ARG A 213      37.151  53.100  49.083  1.00 28.56           N
ATOM   1628  NH2  ARG A 213      37.536  51.602  47.364  1.00 27.29           N
ATOM   1629  N    LEU A 214      34.024  58.280  45.077  1.00 20.35           N
ATOM   1630  CA   LEU A 214      34.090  59.740  44.883  1.00 19.65           C
ATOM   1631  C    LEU A 214      33.364  60.553  45.981  1.00 22.18           C
ATOM   1632  O    LEU A 214      33.867  61.604  46.448  1.00 21.11           O
ATOM   1633  CB   LEU A 214      33.530  60.168  43.502  1.00 18.20           C
ATOM   1634  CG   LEU A 214      33.431  61.697  43.267  1.00 19.73           C
ATOM   1635  CD1  LEU A 214      34.833  62.273  43.091  1.00 20.83           C
ATOM   1636  CD2  LEU A 214      32.609  62.031  42.009  1.00 21.37           C
ATOM   1637  N    ALA A 215      32.179  60.108  46.395  1.00 20.10           N
ATOM   1638  CA   ALA A 215      31.496  60.837  47.453  1.00 21.34           C
ATOM   1639  C    ALA A 215      32.337  60.760  48.747  1.00 19.40           C
ATOM   1640  O    ALA A 215      32.396  61.741  49.507  1.00 21.82           O
ATOM   1641  CB   ALA A 215      30.095  60.256  47.694  1.00 19.16           C
ATOM   1642  N    ALA A 216      32.976  59.624  48.999  1.00 18.30           N
ATOM   1643  CA   ALA A 216      33.797  59.507  50.193  1.00 19.75           C
ATOM   1644  C    ALA A 216      35.026  60.419  50.102  1.00 21.24           C
ATOM   1645  O    ALA A 216      35.419  60.988  51.106  1.00 22.03           O
ATOM   1646  CB   ALA A 216      34.200  58.070  50.452  1.00 19.41           C
ATOM   1647  N    ASP A 217      35.601  60.597  48.909  1.00 22.75           N
ATOM   1648  CA   ASP A 217      36.770  61.475  48.747  1.00 22.47           C
ATOM   1649  C    ASP A 217      36.373  62.924  48.872  1.00 23.67           C
ATOM   1650  O    ASP A 217      37.057  63.702  49.533  1.00 24.14           O
ATOM   1651  CB   ASP A 217      37.467  61.258  47.392  1.00 23.40           C
ATOM   1652  CG   ASP A 217      38.157  59.898  47.293  1.00 22.68           C
ATOM   1653  OD1  ASP A 217      38.549  59.344  48.329  1.00 25.31           O
ATOM   1654  OD2  ASP A 217      38.338  59.357  46.163  1.00 27.90           O
ATOM   1655  N    VAL A 218      35.263  63.305  48.251  1.00 21.61           N
ATOM   1656  CA   VAL A 218      34.826  64.680  48.335  1.00 21.36           C
ATOM   1657  C    VAL A 218      34.487  65.015  49.798  1.00 21.55           C
ATOM   1658  O    VAL A 218      34.601  66.163  50.205  1.00 23.24           O
ATOM   1659  CB   VAL A 218      33.595  64.932  47.413  1.00 21.06           C
ATOM   1660  CG1  VAL A 218      32.915  66.302  47.740  1.00 22.10           C
ATOM   1661  CG2  VAL A 218      34.034  64.911  45.941  1.00 21.23           C
ATOM   1662  N    ALA A 219      34.087  64.016  50.573  1.00 20.61           N
ATOM   1663  CA   ALA A 219      33.718  64.221  51.985  1.00 22.76           C
ATOM   1664  C    ALA A 219      34.953  64.087  52.841  1.00 24.55           C
ATOM   1665  O    ALA A 219      34.896  64.300  54.037  1.00 23.45           O
ATOM   1666  CB   ALA A 219      32.679  63.167  52.448  1.00 21.15           C
ATOM   1667  N    ASP A 220      36.056  63.693  52.202  1.00 25.94           N
ATOM   1668  CA   ASP A 220      37.365  63.503  52.849  1.00 27.25           C
ATOM   1669  C    ASP A 220      37.433  62.469  53.974  1.00 27.62           C
ATOM   1670  O    ASP A 220      38.070  62.702  55.008  1.00 28.03           O
ATOM   1671  CB   ASP A 220      37.905  64.845  53.339  1.00 28.27           C
ATOM   1672  CG   ASP A 220      39.356  64.751  53.824  1.00 31.43           C
ATOM   1673  OD1  ASP A 220      40.083  63.839  53.334  1.00 30.56           O
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ATOM   1674  OD2 ASP A 220    39.750  65.600  54.681  1.00 30.63           O
ATOM   1675  N   VAL A 221    36.765  61.330  53.786  1.00 24.42           N
ATOM   1676  CA  VAL A 221    36.817  60.263  54.761  1.00 24.56           C
ATOM   1677  C   VAL A 221    37.092  58.972  54.021  1.00 25.36           C
ATOM   1678  O   VAL A 221    36.572  58.737  52.923  1.00 27.78           O
ATOM   1679  CB  VAL A 221    35.502  60.152  55.600  1.00 24.61           C
ATOM   1680  CG1 VAL A 221    35.395  61.358  56.525  1.00 21.23           C
ATOM   1681  CG2 VAL A 221    34.277  60.086  54.662  1.00 22.94           C
ATOM   1682  N   PRO A 222    37.947  58.122  54.594  1.00 25.31           N
ATOM   1683  CA  PRO A 222    38.344  56.828  54.031  1.00 23.42           C
ATOM   1684  C   PRO A 222    37.323  55.705  54.141  1.00 22.70           C
ATOM   1685  O   PRO A 222    37.697  54.599  54.432  1.00 19.53           O
ATOM   1686  CB  PRO A 222    39.621  56.486  54.813  1.00 24.10           C
ATOM   1687  CG  PRO A 222    39.338  57.081  56.183  1.00 24.71           C
ATOM   1688  CD  PRO A 222    38.733  58.433  55.810  1.00 26.45           C
ATOM   1689  N   THR A 223    36.043  55.998  53.889  1.00 21.54           N
ATOM   1690  CA  THR A 223    34.980  54.977  54.002  1.00 20.32           C
ATOM   1691  C   THR A 223    35.272  53.618  53.361  1.00 20.63           C
ATOM   1692  O   THR A 223    35.819  53.530  52.256  1.00 21.90           O
ATOM   1693  CB  THR A 223    33.708  55.517  53.381  1.00 18.67           C
ATOM   1694  OG1 THR A 223    33.497  56.838  53.875  1.00 19.51           O
ATOM   1695  CG2 THR A 223    32.513  54.611  53.697  1.00 20.08           C
ATOM   1696  N   VAL A 224    34.910  52.536  54.028  1.00 20.69           N
ATOM   1697  CA  VAL A 224    35.116  51.229  53.432  1.00 21.83           C
ATOM   1698  C   VAL A 224    34.007  50.975  52.402  1.00 24.24           C
ATOM   1699  O   VAL A 224    32.809  51.115  52.709  1.00 22.73           O
ATOM   1700  CB  VAL A 224    35.100  50.125  54.485  1.00 21.81           C
ATOM   1701  CG1 VAL A 224    35.180  48.756  53.829  1.00 22.73           C
ATOM   1702  CG2 VAL A 224    36.298  50.308  55.441  1.00 23.18           C
ATOM   1703  N   VAL A 225    34.409  50.603  51.179  1.00 24.38           N
ATOM   1704  CA  VAL A 225    33.437  50.320  50.096  1.00 25.05           C
ATOM   1705  C   VAL A 225    33.327  48.833  49.782  1.00 24.06           C
ATOM   1706  O   VAL A 225    34.300  48.173  49.419  1.00 26.90           O
ATOM   1707  CB  VAL A 225    33.788  51.105  48.828  1.00 22.56           C
ATOM   1708  CG1 VAL A 225    32.870  50.676  47.644  1.00 23.06           C
ATOM   1709  CG2 VAL A 225    33.647  52.577  49.115  1.00 23.40           C
ATOM   1710  N   ILE A 226    32.124  48.292  49.937  1.00 23.39           N
ATOM   1711  CA  ILE A 226    31.885  46.891  49.705  1.00 20.01           C
ATOM   1712  C   ILE A 226    31.052  46.698  48.433  1.00 22.60           C
ATOM   1713  O   ILE A 226    30.045  47.376  48.247  1.00 21.76           O
ATOM   1714  CB  ILE A 226    31.143  46.295  50.890  1.00 20.07           C
ATOM   1715  CG1 ILE A 226    31.954  46.523  52.179  1.00 20.42           C
ATOM   1716  CG2 ILE A 226    30.842  44.817  50.639  1.00 18.35           C
ATOM   1717  CD1 ILE A 226    31.209  46.082  53.431  1.00 23.66           C
ATOM   1718  N   ALA A 227    31.484  45.762  47.582  1.00 22.62           N
ATOM   1719  CA  ALA A 227    30.822  45.452  46.314  1.00 22.31           C
ATOM   1720  C   ALA A 227    30.142  44.114  46.449  1.00 23.55           C
ATOM   1721  O   ALA A 227    30.771  43.117  46.812  1.00 24.24           O
ATOM   1722  CB  ALA A 227    31.848  45.413  45.171  1.00 22.88           C
ATOM   1723  N   ARG A 228    28.846  44.085  46.156  1.00 22.31           N
ATOM   1724  CA  ARG A 228    28.083  42.859  46.267  1.00 20.31           C
ATOM   1725  C   ARG A 228    27.578  42.427  44.915  1.00 22.24           C
ATOM   1726  O   ARG A 228    27.134  43.279  44.133  1.00 21.32           O
ATOM   1727  CB  ARG A 228    26.872  43.061  47.176  1.00 20.50           C
ATOM   1728  CG  ARG A 228    25.798  41.981  47.048  1.00 20.18           C
ATOM   1729  CD  ARG A 228    24.597  42.244  47.995  1.00 22.88           C
ATOM   1730  NE  ARG A 228    23.325  41.764  47.438  1.00 20.28           N
ATOM   1731  CZ  ARG A 228    22.170  41.767  48.098  1.00 21.18           C
ATOM   1732  NH1 ARG A 228    22.128  42.231  49.330  1.00 20.08           N
ATOM   1733  NH2 ARG A 228    21.065  41.263  47.550  1.00 18.45           N
ATOM   1734  N   THR A 229    27.625  41.118  44.637  1.00 20.55           N
ATOM   1735  CA  THR A 229    27.079  40.640  43.367  1.00 20.66           C
ATOM   1736  C   THR A 229    25.944  39.647  43.618  1.00 20.71           C
ATOM   1737  O   THR A 229    26.042  38.784  44.495  1.00 20.11           O
ATOM   1738  CB  THR A 229    28.111  39.929  42.458  1.00 21.49           C
ATOM   1739  OG1 THR A 229    27.440  39.507  41.262  1.00 21.27           O
ATOM   1740  CG2 THR A 229    28.705  38.671  43.160  1.00 21.20           C
ATOM   1741  N   ASP A 230    24.867  39.778  42.843  1.00 19.83           N
ATOM   1742  CA  ASP A 230    23.693  38.912  42.975  1.00 21.31           C
ATOM   1743  C   ASP A 230    23.546  37.903  41.828  1.00 21.69           C
ATOM   1744  O   ASP A 230    22.457  37.348  41.625  1.00 22.49           O
ATOM   1745  CB  ASP A 230    22.433  39.783  43.009  1.00 21.76           C
ATOM   1746  CG  ASP A 230    22.202  40.388  44.376  1.00 21.04           C
ATOM   1747  OD1 ASP A 230    21.521  39.726  45.179  1.00 21.27           O
ATOM   1748  OD2 ASP A 230    22.729  41.494  44.638  1.00 19.86           O
ATOM   1749  N   ALA A 231    24.645  37.673  41.111  1.00 22.88           N
ATOM   1750  CA  ALA A 231    24.676  36.795  39.926  1.00 23.90           C
ATOM   1751  C   ALA A 231    24.555  35.304  40.180  1.00 24.72           C
ATOM   1752  O   ALA A 231    24.360  34.529  39.233  1.00 25.53           O
ATOM   1753  CB  ALA A 231    25.947  37.069  39.125  1.00 21.79           C
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ATOM   1754  N    GLU A 232      24.691  34.889  41.435  1.00 24.23           N
ATOM   1755  CA   GLU A 232      24.580  33.474  41.746  1.00 24.39           C
ATOM   1756  C    GLU A 232      23.193  32.965  41.369  1.00 25.21           C
ATOM   1757  O    GLU A 232      23.067  31.926  40.722  1.00 25.66           O
ATOM   1758  CB   GLU A 232      24.799  33.237  43.236  1.00 26.49           C
ATOM   1759  CG   GLU A 232      25.154  31.782  43.631  1.00 30.17           C
ATOM   1760  CD   GLU A 232      23.958  30.849  43.716  1.00 32.44           C
ATOM   1761  OE1  GLU A 232      22.949  31.182  44.388  1.00 31.42           O
ATOM   1762  OE2  GLU A 232      24.034  29.755  43.125  1.00 31.70           O
ATOM   1763  N    ALA A 233      22.153  33.704  41.775  1.00 24.17           N
ATOM   1764  CA   ALA A 233      20.751  33.318  41.526  1.00 22.20           C
ATOM   1765  C    ALA A 233      20.008  34.121  40.449  1.00 23.90           C
ATOM   1766  O    ALA A 233      18.994  33.644  39.906  1.00 24.08           O
ATOM   1767  CB   ALA A 233      19.945  33.390  42.857  1.00 22.59           C
ATOM   1768  N    ALA A 234      20.465  35.335  40.149  1.00 22.93           N
ATOM   1769  CA   ALA A 234      19.768  36.154  39.146  1.00 23.29           C
ATOM   1770  C    ALA A 234      19.766  35.553  37.733  1.00 23.07           C
ATOM   1771  O    ALA A 234      20.839  35.236  37.181  1.00 23.28           O
ATOM   1772  CB   ALA A 234      20.365  37.523  39.096  1.00 19.79           C
ATOM   1773  N    THR A 235      18.570  35.454  37.144  1.00 23.06           N
ATOM   1774  CA   THR A 235      18.404  34.912  35.797  1.00 24.12           C
ATOM   1775  C    THR A 235      18.040  35.975  34.750  1.00 24.29           C
ATOM   1776  O    THR A 235      17.676  35.640  33.620  1.00 25.48           O
ATOM   1777  CB   THR A 235      17.322  33.807  35.773  1.00 24.51           C
ATOM   1778  OG1  THR A 235      16.033  34.373  36.059  1.00 26.24           O
ATOM   1779  CG2  THR A 235      17.617  32.767  36.822  1.00 25.78           C
ATOM   1780  N    LEU A 236      18.120  37.249  35.126  1.00 22.13           N
ATOM   1781  CA   LEU A 236      17.814  38.349  34.214  1.00 20.54           C
ATOM   1782  C    LEU A 236      18.875  39.444  34.319  1.00 20.26           C
ATOM   1783  O    LEU A 236      19.481  39.641  35.389  1.00 20.83           O
ATOM   1784  CB   LEU A 236      16.447  38.956  34.558  1.00 20.66           C
ATOM   1785  CG   LEU A 236      15.268  37.994  34.459  1.00 20.75           C
ATOM   1786  CD1  LEU A 236      14.110  38.457  35.320  1.00 21.43           C
ATOM   1787  CD2  LEU A 236      14.873  37.861  32.998  1.00 21.91           C
ATOM   1788  N    ILE A 237      19.082  40.153  33.216  1.00 17.97           N
ATOM   1789  CA   ILE A 237      20.008  41.272  33.157  1.00 19.28           C
ATOM   1790  C    ILE A 237      19.371  42.341  32.263  1.00 20.64           C
ATOM   1791  O    ILE A 237      18.590  42.021  31.328  1.00 22.83           O
ATOM   1792  CB   ILE A 237      21.406  40.812  32.634  1.00 20.31           C
ATOM   1793  CG1  ILE A 237      22.356  41.987  32.692  1.00 18.55           C
ATOM   1794  CG2  ILE A 237      21.285  40.172  31.214  1.00 19.40           C
ATOM   1795  CD1  ILE A 237      23.793  41.596  32.612  1.00 21.37           C
ATOM   1796  N    THR A 238      19.668  43.609  32.530  1.00 20.96           N
ATOM   1797  CA   THR A 238      19.033  44.683  31.781  1.00 21.29           C
ATOM   1798  C    THR A 238      19.467  44.819  30.346  1.00 21.58           C
ATOM   1799  O    THR A 238      18.670  45.192  29.492  1.00 19.43           O
ATOM   1800  CB   THR A 238      19.265  46.047  32.425  1.00 22.30           C
ATOM   1801  OG1  THR A 238      20.672  46.301  32.488  1.00 24.21           O
ATOM   1802  CG2  THR A 238      18.677  46.101  33.819  1.00 20.86           C
ATOM   1803  N    SER A 239      20.731  44.496  30.082  1.00 22.35           N
ATOM   1804  CA   SER A 239      21.285  44.696  28.757  1.00 23.57           C
ATOM   1805  C    SER A 239      22.505  43.798  28.526  1.00 23.66           C
ATOM   1806  O    SER A 239      23.113  43.301  29.485  1.00 24.44           O
ATOM   1807  CB   SER A 239      21.667  46.182  28.660  1.00 24.49           C
ATOM   1808  OG   SER A 239      22.486  46.475  27.554  1.00 26.74           O
ATOM   1809  N    ASP A 240      22.843  43.584  27.258  1.00 23.24           N
ATOM   1810  CA   ASP A 240      23.983  42.746  26.865  1.00 23.95           C
ATOM   1811  C    ASP A 240      25.066  43.664  26.318  1.00 23.97           C
ATOM   1812  O    ASP A 240      25.935  43.240  25.562  1.00 26.23           O
ATOM   1813  CB   ASP A 240      23.555  41.786  25.750  1.00 25.24           C
ATOM   1814  CG   ASP A 240      22.954  42.524  24.549  1.00 27.18           C
ATOM   1815  OD1  ASP A 240      22.869  43.785  24.564  1.00 26.36           O
ATOM   1816  OD2  ASP A 240      22.566  41.843  23.575  1.00 29.54           O
ATOM   1817  N    VAL A 241      25.009  44.928  26.697  1.00 24.95           N
ATOM   1818  CA   VAL A 241      25.953  45.895  26.187  1.00 25.06           C
ATOM   1819  C    VAL A 241      27.400  45.596  26.559  1.00 26.65           C
ATOM   1820  O    VAL A 241      28.313  45.861  25.766  1.00 26.37           O
ATOM   1821  CB   VAL A 241      25.585  47.304  26.659  1.00 26.17           C
ATOM   1822  CG1  VAL A 241      25.832  47.427  28.141  1.00 25.10           C
ATOM   1823  CG2  VAL A 241      26.374  48.336  25.855  1.00 25.03           C
ATOM   1824  N    ASP A 242      27.602  45.018  27.742  1.00 24.86           N
ATOM   1825  CA   ASP A 242      28.946  44.730  28.249  1.00 25.85           C
ATOM   1826  C    ASP A 242      29.497  43.384  27.817  1.00 26.52           C
ATOM   1827  O    ASP A 242      28.914  42.338  28.122  1.00 25.38           O
ATOM   1828  CB   ASP A 242      28.935  44.800  29.779  1.00 26.07           C
ATOM   1829  CG   ASP A 242      30.331  45.010  30.367  1.00 29.75           C
ATOM   1830  OD1  ASP A 242      31.249  44.257  29.949  1.00 29.15           O
ATOM   1831  OD2  ASP A 242      30.508  45.916  31.234  1.00 26.19           O
ATOM   1832  N    GLU A 243      30.648  43.406  27.140  1.00 28.31           N
ATOM   1833  CA   GLU A 243      31.271  42.181  26.660  1.00 29.83           C
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| ATOM | 1834 | C   | GLU A 243 | 31.534 | 41.139 | 27.723 | 1.00 29.05 | C |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 1835 | O   | GLU A 243 | 31.497 | 39.940 | 27.445 | 1.00 27.73 | O |
| ATOM | 1836 | CB  | GLU A 243 | 32.571 | 42.525 | 25.914 | 1.00 33.79 | C |
| ATOM | 1837 | CG  | GLU A 243 | 32.301 | 43.305 | 24.612 | 1.00 38.65 | C |
| ATOM | 1838 | CD  | GLU A 243 | 33.578 | 43.813 | 23.933 | 1.00 42.92 | C |
| ATOM | 1839 | OE1 | GLU A 243 | 34.624 | 43.132 | 24.076 | 1.00 43.50 | O |
| ATOM | 1840 | OE2 | GLU A 243 | 33.527 | 44.880 | 23.250 | 1.00 44.38 | O |
| ATOM | 1841 | N   | ARG A 244 | 31.779 | 41.582 | 28.954 | 1.00 27.83 | N |
| ATOM | 1842 | CA  | ARG A 244 | 32.038 | 40.646 | 30.033 | 1.00 26.75 | C |
| ATOM | 1843 | C   | ARG A 244 | 30.786 | 39.890 | 30.453 | 1.00 26.16 | C |
| ATOM | 1844 | O   | ARG A 244 | 30.869 | 38.818 | 31.058 | 1.00 26.27 | O |
| ATOM | 1845 | CB  | ARG A 244 | 32.621 | 41.390 | 31.243 | 1.00 27.77 | C |
| ATOM | 1846 | CG  | ARG A 244 | 33.943 | 42.122 | 30.950 | 1.00 27.06 | C |
| ATOM | 1847 | CD  | ARG A 244 | 34.274 | 43.094 | 32.061 | 1.00 26.60 | C |
| ATOM | 1848 | NE  | ARG A 244 | 33.498 | 44.302 | 31.881 | 1.00 27.39 | N |
| ATOM | 1849 | CZ  | ARG A 244 | 33.812 | 45.479 | 32.398 | 1.00 27.68 | C |
| ATOM | 1850 | NH1 | ARG A 244 | 34.908 | 45.613 | 33.156 | 1.00 27.42 | N |
| ATOM | 1851 | NH2 | ARG A 244 | 33.056 | 46.528 | 32.113 | 1.00 26.47 | N |
| ATOM | 1852 | N   | ASP A 245 | 29.609 | 40.443 | 30.153 | 1.00 26.43 | N |
| ATOM | 1853 | CA  | ASP A 245 | 28.358 | 39.774 | 30.537 | 1.00 23.68 | C |
| ATOM | 1854 | C   | ASP A 245 | 27.847 | 38.883 | 29.405 | 1.00 24.49 | C |
| ATOM | 1855 | O   | ASP A 245 | 27.169 | 37.888 | 29.642 | 1.00 24.72 | O |
| ATOM | 1856 | CB  | ASP A 245 | 27.274 | 40.815 | 30.882 | 1.00 22.78 | C |
| ATOM | 1857 | CG  | ASP A 245 | 27.690 | 41.737 | 31.999 | 1.00 21.60 | C |
| ATOM | 1858 | OD1 | ASP A 245 | 28.226 | 41.198 | 32.982 | 1.00 24.22 | O |
| ATOM | 1859 | OD2 | ASP A 245 | 27.473 | 42.973 | 31.897 | 1.00 22.75 | O |
| ATOM | 1860 | N   | GLN A 246 | 28.193 | 39.257 | 28.179 | 1.00 26.05 | N |
| ATOM | 1861 | CA  | GLN A 246 | 27.742 | 38.521 | 26.996 | 1.00 29.04 | C |
| ATOM | 1862 | C   | GLN A 246 | 27.881 | 37.015 | 26.999 | 1.00 29.21 | C |
| ATOM | 1863 | O   | GLN A 246 | 27.020 | 36.307 | 26.472 | 1.00 31.78 | O |
| ATOM | 1864 | CB  | GLN A 246 | 28.396 | 39.110 | 25.749 | 1.00 28.19 | C |
| ATOM | 1865 | CG  | GLN A 246 | 27.671 | 40.335 | 25.258 | 1.00 29.68 | C |
| ATOM | 1866 | CD  | GLN A 246 | 28.506 | 41.134 | 24.298 | 1.00 31.67 | C |
| ATOM | 1867 | OE1 | GLN A 246 | 29.372 | 40.575 | 23.625 | 1.00 33.07 | O |
| ATOM | 1868 | NE2 | GLN A 246 | 28.258 | 42.443 | 24.219 | 1.00 33.26 | N |
| ATOM | 1869 | N   | PRO A 247 | 28.944 | 36.494 | 27.606 | 1.00 30.08 | N |
| ATOM | 1870 | CA  | PRO A 247 | 29.151 | 35.043 | 27.653 | 1.00 29.08 | C |
| ATOM | 1871 | C   | PRO A 247 | 28.028 | 34.246 | 28.316 | 1.00 29.63 | C |
| ATOM | 1872 | O   | PRO A 247 | 27.853 | 33.063 | 28.036 | 1.00 30.20 | O |
| ATOM | 1873 | CB  | PRO A 247 | 30.463 | 34.919 | 28.413 | 1.00 29.02 | C |
| ATOM | 1874 | CG  | PRO A 247 | 31.200 | 36.138 | 28.003 | 1.00 28.94 | C |
| ATOM | 1875 | CD  | PRO A 247 | 30.137 | 37.213 | 28.088 | 1.00 29.13 | C |
| ATOM | 1876 | N   | PHE A 248 | 27.275 | 34.883 | 29.208 | 1.00 27.70 | N |
| ATOM | 1877 | CA  | PHE A 248 | 26.192 | 34.210 | 29.911 | 1.00 27.28 | C |
| ATOM | 1878 | C   | PHE A 248 | 24.803 | 34.542 | 29.336 | 1.00 27.03 | C |
| ATOM | 1879 | O   | PHE A 248 | 23.801 | 33.949 | 29.759 | 1.00 27.34 | O |
| ATOM | 1880 | CB  | PHE A 248 | 26.235 | 34.606 | 31.398 | 1.00 27.43 | C |
| ATOM | 1881 | CG  | PHE A 248 | 27.613 | 34.471 | 32.019 | 1.00 26.01 | C |
| ATOM | 1882 | CD1 | PHE A 248 | 28.051 | 33.249 | 32.482 | 1.00 27.27 | C |
| ATOM | 1883 | CD2 | PHE A 248 | 28.474 | 35.562 | 32.092 | 1.00 26.32 | C |
| ATOM | 1884 | CE1 | PHE A 248 | 29.329 | 33.098 | 33.009 | 1.00 27.78 | C |
| ATOM | 1885 | CE2 | PHE A 248 | 29.763 | 35.428 | 32.620 | 1.00 27.55 | C |
| ATOM | 1886 | CZ  | PHE A 248 | 30.187 | 34.189 | 33.078 | 1.00 27.79 | C |
| ATOM | 1887 | N   | ILE A 249 | 24.741 | 35.485 | 28.396 | 1.00 27.27 | N |
| ATOM | 1888 | CA  | ILE A 249 | 23.461 | 35.895 | 27.777 | 1.00 29.43 | C |
| ATOM | 1889 | C   | ILE A 249 | 22.960 | 34.726 | 26.916 | 1.00 30.07 | C |
| ATOM | 1890 | O   | ILE A 249 | 23.701 | 34.207 | 26.084 | 1.00 29.96 | O |
| ATOM | 1891 | CB  | ILE A 249 | 23.639 | 37.174 | 26.876 | 1.00 30.43 | C |
| ATOM | 1892 | CG1 | ILE A 249 | 24.246 | 38.323 | 27.701 | 1.00 33.00 | C |
| ATOM | 1893 | CG2 | ILE A 249 | 22.312 | 37.643 | 26.306 | 1.00 30.17 | C |
| ATOM | 1894 | CD1 | ILE A 249 | 23.289 | 39.033 | 28.560 | 1.00 31.08 | C |
| ATOM | 1895 | N   | THR A 250 | 21.721 | 34.292 | 27.134 | 1.00 30.49 | N |
| ATOM | 1896 | CA  | THR A 250 | 21.183 | 33.175 | 26.369 | 1.00 31.25 | C |
| ATOM | 1897 | C   | THR A 250 | 20.498 | 33.569 | 25.063 | 1.00 31.78 | C |
| ATOM | 1898 | O   | THR A 250 | 20.352 | 32.720 | 24.182 | 1.00 33.87 | O |
| ATOM | 1899 | CB  | THR A 250 | 20.138 | 32.377 | 27.145 | 1.00 31.82 | C |
| ATOM | 1900 | OG1 | THR A 250 | 18.875 | 33.062 | 27.049 | 1.00 34.00 | O |
| ATOM | 1901 | CG2 | THR A 250 | 20.536 | 32.220 | 28.599 | 1.00 32.96 | C |
| ATOM | 1902 | N   | GLY A 251 | 20.071 | 34.828 | 24.938 | 1.00 31.02 | N |
| ATOM | 1903 | CA  | GLY A 251 | 19.397 | 35.287 | 23.730 | 1.00 31.41 | C |
| ATOM | 1904 | C   | GLY A 251 | 17.899 | 35.450 | 23.953 | 1.00 31.35 | C |
| ATOM | 1905 | O   | GLY A 251 | 17.228 | 36.233 | 23.285 | 1.00 33.66 | O |
| ATOM | 1906 | N   | GLU A 252 | 17.369 | 34.677 | 24.890 | 1.00 31.94 | N |
| ATOM | 1907 | CA  | GLU A 252 | 15.966 | 34.736 | 25.252 | 1.00 31.64 | C |
| ATOM | 1908 | C   | GLU A 252 | 15.655 | 36.055 | 25.969 | 1.00 30.93 | C |
| ATOM | 1909 | O   | GLU A 252 | 16.489 | 36.552 | 26.736 | 1.00 28.94 | O |
| ATOM | 1910 | CB  | GLU A 252 | 15.653 | 33.614 | 26.194 | 1.00 34.57 | C |
| ATOM | 1911 | CG  | GLU A 252 | 15.301 | 32.350 | 25.516 | 1.00 40.92 | C |
| ATOM | 1912 | CD  | GLU A 252 | 14.492 | 31.488 | 26.433 | 1.00 43.65 | C |
| ATOM | 1913 | OE1 | GLU A 252 | 13.717 | 32.071 | 27.240 | 1.00 46.77 | O |

| ATOM | 1914 | OE2 | GLU | A | 252 | 14.616 | 30.244 | 26.350 | 1.00 | 46.26 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1915 | N | ARG | A | 253 | 14.455 | 36.583 | 25.746 | 1.00 | 27.95 | N |
| ATOM | 1916 | CA | ARG | A | 253 | 14.027 | 37.848 | 26.338 | 1.00 | 29.50 | C |
| ATOM | 1917 | C | ARG | A | 253 | 12.691 | 37.732 | 27.085 | 1.00 | 28.90 | C |
| ATOM | 1918 | O | ARG | A | 253 | 11.921 | 36.794 | 26.852 | 1.00 | 30.02 | O |
| ATOM | 1919 | CB | ARG | A | 253 | 13.863 | 38.901 | 25.237 | 1.00 | 30.15 | C |
| ATOM | 1920 | CG | ARG | A | 253 | 15.065 | 39.082 | 24.338 | 1.00 | 32.26 | C |
| ATOM | 1921 | CD | ARG | A | 253 | 16.182 | 39.787 | 25.073 | 1.00 | 33.58 | C |
| ATOM | 1922 | NE | ARG | A | 253 | 15.841 | 41.172 | 25.343 | 1.00 | 35.16 | N |
| ATOM | 1923 | CZ | ARG | A | 253 | 15.839 | 42.129 | 24.421 | 1.00 | 36.84 | C |
| ATOM | 1924 | NH1 | ARG | A | 253 | 16.165 | 41.831 | 23.169 | 1.00 | 38.07 | N |
| ATOM | 1925 | NH2 | ARG | A | 253 | 15.512 | 43.382 | 24.748 | 1.00 | 36.74 | N |
| ATOM | 1926 | N | THR | A | 254 | 12.426 | 38.678 | 27.993 | 1.00 | 27.40 | N |
| ATOM | 1927 | CA | THR | A | 254 | 11.160 | 38.696 | 28.712 | 1.00 | 27.37 | C |
| ATOM | 1928 | C | THR | A | 254 | 10.276 | 39.754 | 28.051 | 1.00 | 26.47 | C |
| ATOM | 1929 | O | THR | A | 254 | 10.741 | 40.591 | 27.279 | 1.00 | 25.72 | O |
| ATOM | 1930 | CB | THR | A | 254 | 11.305 | 39.053 | 30.244 | 1.00 | 26.09 | C |
| ATOM | 1931 | OG1 | THR | A | 254 | 11.661 | 40.428 | 30.390 | 1.00 | 27.51 | O |
| ATOM | 1932 | CG2 | THR | A | 254 | 12.364 | 38.178 | 30.928 | 1.00 | 26.98 | C |
| ATOM | 1933 | N | ARG | A | 255 | 8.985 | 39.731 | 28.365 | 1.00 | 29.09 | N |
| ATOM | 1934 | CA | ARG | A | 255 | 8.079 | 40.694 | 27.763 | 1.00 | 29.79 | C |
| ATOM | 1935 | C | ARG | A | 255 | 8.438 | 42.151 | 28.130 | 1.00 | 29.10 | C |
| ATOM | 1936 | O | ARG | A | 255 | 8.043 | 43.065 | 27.412 | 1.00 | 30.25 | O |
| ATOM | 1937 | CB | ARG | A | 255 | 6.618 | 40.309 | 28.111 | 1.00 | 33.86 | C |
| ATOM | 1938 | CG | ARG | A | 255 | 6.286 | 38.864 | 27.667 | 1.00 | 38.92 | C |
| ATOM | 1939 | CD | ARG | A | 255 | 4.836 | 38.367 | 27.944 | 1.00 | 44.59 | C |
| ATOM | 1940 | NE | ARG | A | 255 | 3.835 | 38.966 | 27.053 | 1.00 | 49.88 | N |
| ATOM | 1941 | CZ | ARG | A | 255 | 3.842 | 38.867 | 25.717 | 1.00 | 51.67 | C |
| ATOM | 1942 | NH1 | ARG | A | 255 | 4.797 | 38.181 | 25.089 | 1.00 | 52.04 | N |
| ATOM | 1943 | NH2 | ARG | A | 255 | 2.905 | 39.485 | 25.000 | 1.00 | 52.79 | N |
| ATOM | 1944 | N | GLU | A | 256 | 9.190 | 42.368 | 29.222 | 1.00 | 27.83 | N |
| ATOM | 1945 | CA | GLU | A | 256 | 9.616 | 43.731 | 29.632 | 1.00 | 26.97 | C |
| ATOM | 1946 | C | GLU | A | 256 | 10.881 | 44.144 | 28.893 | 1.00 | 26.76 | C |
| ATOM | 1947 | O | GLU | A | 256 | 11.312 | 45.296 | 28.983 | 1.00 | 27.56 | O |
| ATOM | 1948 | CB | GLU | A | 256 | 9.954 | 43.822 | 31.134 | 1.00 | 25.88 | C |
| ATOM | 1949 | CG | GLU | A | 256 | 8.829 | 43.430 | 32.077 | 1.00 | 26.73 | C |
| ATOM | 1950 | CD | GLU | A | 256 | 8.973 | 42.022 | 32.612 | 1.00 | 25.69 | C |
| ATOM | 1951 | OE1 | GLU | A | 256 | 9.542 | 41.174 | 31.883 | 1.00 | 25.82 | O |
| ATOM | 1952 | OE2 | GLU | A | 256 | 8.500 | 41.775 | 33.755 | 1.00 | 24.39 | O |
| ATOM | 1953 | N | GLY | A | 257 | 11.505 | 43.192 | 28.205 | 1.00 | 26.02 | N |
| ATOM | 1954 | CA | GLY | A | 257 | 12.736 | 43.504 | 27.494 | 1.00 | 25.89 | C |
| ATOM | 1955 | C | GLY | A | 257 | 14.024 | 43.093 | 28.213 | 1.00 | 25.73 | C |
| ATOM | 1956 | O | GLY | A | 257 | 15.125 | 43.436 | 27.774 | 1.00 | 25.38 | O |
| ATOM | 1957 | N | PHE | A | 258 | 13.909 | 42.384 | 29.332 | 1.00 | 24.01 | N |
| ATOM | 1958 | CA | PHE | A | 258 | 15.098 | 41.950 | 30.025 | 1.00 | 23.76 | C |
| ATOM | 1959 | C | PHE | A | 258 | 15.686 | 40.765 | 29.225 | 1.00 | 25.18 | C |
| ATOM | 1960 | O | PHE | A | 258 | 15.000 | 40.139 | 28.408 | 1.00 | 25.52 | O |
| ATOM | 1961 | CB | PHE | A | 258 | 14.754 | 41.486 | 31.442 | 1.00 | 22.77 | C |
| ATOM | 1962 | CG | PHE | A | 258 | 14.092 | 42.547 | 32.297 | 1.00 | 22.85 | C |
| ATOM | 1963 | CD1 | PHE | A | 258 | 14.700 | 43.785 | 32.482 | 1.00 | 23.44 | C |
| ATOM | 1964 | CD2 | PHE | A | 258 | 12.904 | 42.262 | 32.981 | 1.00 | 21.67 | C |
| ATOM | 1965 | CE1 | PHE | A | 258 | 14.131 | 44.749 | 33.362 | 1.00 | 23.10 | C |
| ATOM | 1966 | CE2 | PHE | A | 258 | 12.330 | 43.189 | 33.855 | 1.00 | 23.40 | C |
| ATOM | 1967 | CZ | PHE | A | 258 | 12.943 | 44.441 | 34.052 | 1.00 | 22.27 | C |
| ATOM | 1968 | N | TYR | A | 259 | 16.960 | 40.477 | 29.473 | 1.00 | 23.73 | N |
| ATOM | 1969 | CA | TYR | A | 259 | 17.685 | 39.396 | 28.820 | 1.00 | 23.73 | C |
| ATOM | 1970 | C | TYR | A | 259 | 17.858 | 38.275 | 29.831 | 1.00 | 24.23 | C |
| ATOM | 1971 | O | TYR | A | 259 | 18.185 | 38.544 | 30.995 | 1.00 | 24.67 | O |
| ATOM | 1972 | CB | TYR | A | 259 | 19.087 | 39.872 | 28.416 | 1.00 | 21.94 | C |
| ATOM | 1973 | CG | TYR | A | 259 | 19.136 | 40.886 | 27.286 | 1.00 | 23.45 | C |
| ATOM | 1974 | CD1 | TYR | A | 259 | 18.797 | 42.217 | 27.509 | 1.00 | 23.59 | C |
| ATOM | 1975 | CD2 | TYR | A | 259 | 19.516 | 40.502 | 25.986 | 1.00 | 23.30 | C |
| ATOM | 1976 | CE1 | TYR | A | 259 | 18.823 | 43.156 | 26.485 | 1.00 | 24.64 | C |
| ATOM | 1977 | CE2 | TYR | A | 259 | 19.549 | 41.452 | 24.929 | 1.00 | 24.38 | C |
| ATOM | 1978 | CZ | TYR | A | 259 | 19.200 | 42.771 | 25.193 | 1.00 | 25.01 | C |
| ATOM | 1979 | OH | TYR | A | 259 | 19.222 | 43.729 | 24.207 | 1.00 | 24.91 | O |
| ATOM | 1980 | N | ARG | A | 260 | 17.624 | 37.031 | 29.408 | 1.00 | 23.90 | N |
| ATOM | 1981 | CA | ARG | A | 260 | 17.820 | 35.867 | 30.268 | 1.00 | 24.72 | C |
| ATOM | 1982 | C | ARG | A | 260 | 19.321 | 35.692 | 30.322 | 1.00 | 24.20 | C |
| ATOM | 1983 | O | ARG | A | 260 | 20.008 | 35.949 | 29.339 | 1.00 | 24.49 | O |
| ATOM | 1984 | CB | ARG | A | 260 | 17.249 | 34.610 | 29.656 | 1.00 | 26.78 | C |
| ATOM | 1985 | CG | ARG | A | 260 | 15.781 | 34.669 | 29.362 | 1.00 | 31.65 | C |
| ATOM | 1986 | CD | ARG | A | 260 | 15.027 | 34.441 | 30.604 | 1.00 | 35.78 | C |
| ATOM | 1987 | NE | ARG | A | 260 | 13.590 | 34.477 | 30.381 | 1.00 | 39.72 | N |
| ATOM | 1988 | CZ | ARG | A | 260 | 12.726 | 34.487 | 31.381 | 1.00 | 39.34 | C |
| ATOM | 1989 | NH1 | ARG | A | 260 | 13.196 | 34.460 | 32.628 | 1.00 | 40.95 | N |
| ATOM | 1990 | NH2 | ARG | A | 260 | 11.419 | 34.525 | 31.138 | 1.00 | 40.19 | N |
| ATOM | 1991 | N | THR | A | 261 | 19.842 | 35.251 | 31.463 | 1.00 | 24.65 | N |
| ATOM | 1992 | CA | THR | A | 261 | 21.283 | 35.089 | 31.572 | 1.00 | 24.00 | C |
| ATOM | 1993 | C | THR | A | 261 | 21.524 | 33.874 | 32.449 | 1.00 | 24.57 | C |

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ATOM   1994  O    THR A 261      20.687  33.526  33.283  1.00 24.17          O
ATOM   1995  CB   THR A 261      21.939  36.397  32.120  1.00 24.45          C
ATOM   1996  OG1  THR A 261      23.367  36.295  32.038  1.00 24.33          O
ATOM   1997  CG2  THR A 261      21.514  36.680  33.556  1.00 20.83          C
ATOM   1998  N    LYS A 262      22.648  33.200  32.207  1.00 26.55          N
ATOM   1999  CA   LYS A 262      23.014  31.983  32.927  1.00 27.91          C
ATOM   2000  C    LYS A 262      23.621  32.320  34.285  1.00 27.94          C
ATOM   2001  O    LYS A 262      24.686  32.949  34.382  1.00 26.93          O
ATOM   2002  CB   LYS A 262      24.007  31.197  32.072  1.00 31.16          C
ATOM   2003  CG   LYS A 262      23.385  30.530  30.855  1.00 36.27          C
ATOM   2004  CD   LYS A 262      24.470  30.042  29.869  1.00 40.36          C
ATOM   2005  CE   LYS A 262      24.105  28.701  29.211  1.00 43.25          C
ATOM   2006  NZ   LYS A 262      22.731  28.670  28.619  1.00 44.49          N
ATOM   2007  N    ASN A 263      22.925  31.913  35.330  1.00 27.62          N
ATOM   2008  CA   ASN A 263      23.361  32.196  36.688  1.00 30.71          C
ATOM   2009  C    ASN A 263      24.188  31.084  37.277  1.00 31.22          C
ATOM   2010  O    ASN A 263      24.014  29.899  36.934  1.00 33.48          O
ATOM   2011  CB   ASN A 263      22.165  32.362  37.604  1.00 31.07          C
ATOM   2012  CG   ASN A 263      21.356  31.108  37.683  1.00 32.46          C
ATOM   2013  OD1  ASN A 263      20.770  30.688  36.694  1.00 36.43          O
ATOM   2014  ND2  ASN A 263      21.330  30.486  38.848  1.00 33.77          N
ATOM   2015  N    GLY A 264      25.031  31.469  38.222  1.00 30.86          N
ATOM   2016  CA   GLY A 264      25.872  30.513  38.913  1.00 29.99          C
ATOM   2017  C    GLY A 264      27.083  31.209  39.485  1.00 30.06          C
ATOM   2018  O    GLY A 264      27.222  32.425  39.397  1.00 30.07          O
ATOM   2019  N    ILE A 265      27.993  30.431  40.042  1.00 30.13          N
ATOM   2020  CA   ILE A 265      29.166  31.013  40.631  1.00 29.80          C
ATOM   2021  C    ILE A 265      30.130  31.562  39.584  1.00 28.42          C
ATOM   2022  O    ILE A 265      30.880  32.486  39.874  1.00 27.02          O
ATOM   2023  CB   ILE A 265      29.849  29.991  41.527  1.00 31.30          C
ATOM   2024  CG1  ILE A 265      31.025  30.641  42.237  1.00 31.64          C
ATOM   2025  CG2  ILE A 265      30.257  28.771  40.697  1.00 32.97          C
ATOM   2026  CD1  ILE A 265      31.688  29.723  43.231  1.00 34.02          C
ATOM   2027  N    GLU A 266      30.073  31.034  38.359  1.00 29.04          N
ATOM   2028  CA   GLU A 266      30.958  31.482  37.288  1.00 29.66          C
ATOM   2029  C    GLU A 266      30.717  32.979  37.031  1.00 29.10          C
ATOM   2030  O    GLU A 266      31.665  33.778  36.989  1.00 27.63          O
ATOM   2031  CB   GLU A 266      30.751  30.600  36.011  1.00 32.89          C
ATOM   2032  CG   GLU A 266      31.604  31.029  34.782  1.00 38.57          C
ATOM   2033  CD   GLU A 266      31.533  30.077  33.538  1.00 42.10          C
ATOM   2034  OE1  GLU A 266      30.466  29.468  33.259  1.00 42.02          O
ATOM   2035  OE2  GLU A 266      32.561  29.965  32.812  1.00 43.31          O
ATOM   2036  N    PRO A 267      29.447  33.390  36.861  1.00 26.94          N
ATOM   2037  CA   PRO A 267      29.197  34.818  36.631  1.00 27.47          C
ATOM   2038  C    PRO A 267      29.678  35.654  37.858  1.00 26.60          C
ATOM   2039  O    PRO A 267      30.211  36.774  37.709  1.00 26.18          O
ATOM   2040  CB   PRO A 267      27.671  34.886  36.461  1.00 27.25          C
ATOM   2041  CG   PRO A 267      27.284  33.502  36.043  1.00 26.71          C
ATOM   2042  CD   PRO A 267      28.201  32.599  36.797  1.00 28.19          C
ATOM   2043  N    CYS A 268      29.491  35.101  39.057  1.00 27.47          N
ATOM   2044  CA   CYS A 268      29.895  35.794  40.280  1.00 27.95          C
ATOM   2045  C    CYS A 268      31.398  36.034  40.320  1.00 28.14          C
ATOM   2046  O    CYS A 268      31.845  37.134  40.627  1.00 28.11          O
ATOM   2047  CB   CYS A 268      29.476  35.012  41.513  1.00 28.39          C
ATOM   2048  SG   CYS A 268      27.690  34.999  41.753  1.00 28.23          S
ATOM   2049  N    ILE A 269      32.173  35.008  39.970  1.00 27.19          N
ATOM   2050  CA   ILE A 269      33.615  35.145  39.984  1.00 26.87          C
ATOM   2051  C    ILE A 269      34.075  36.172  39.000  1.00 26.28          C
ATOM   2052  O    ILE A 269      34.945  36.970  39.309  1.00 26.01          O
ATOM   2053  CB   ILE A 269      34.271  33.798  39.695  1.00 28.98          C
ATOM   2054  CG1  ILE A 269      34.039  32.884  40.882  1.00 27.98          C
ATOM   2055  CG2  ILE A 269      35.759  33.971  39.394  1.00 29.90          C
ATOM   2056  CD1  ILE A 269      34.086  31.406  40.545  1.00 29.95          C
ATOM   2057  N    ALA A 270      33.476  36.180  37.810  1.00 26.65          N
ATOM   2058  CA   ALA A 270      33.850  37.132  36.767  1.00 25.02          C
ATOM   2059  C    ALA A 270      33.580  38.581  37.216  1.00 24.49          C
ATOM   2060  O    ALA A 270      34.404  39.469  37.026  1.00 24.77          O
ATOM   2061  CB   ALA A 270      33.044  36.825  35.461  1.00 25.54          C
ATOM   2062  N    ARG A 271      32.398  38.826  37.768  1.00 24.28          N
ATOM   2063  CA   ARG A 271      32.083  40.170  38.245  1.00 24.21          C
ATOM   2064  C    ARG A 271      33.002  40.538  39.422  1.00 21.64          C
ATOM   2065  O    ARG A 271      33.556  41.650  39.450  1.00 21.83          O
ATOM   2066  CB   ARG A 271      30.609  40.249  38.654  1.00 23.04          C
ATOM   2067  CG   ARG A 271      29.709  40.492  37.437  1.00 22.46          C
ATOM   2068  CD   ARG A 271      28.246  40.285  37.704  1.00 25.08          C
ATOM   2069  NE   ARG A 271      27.519  40.534  36.458  1.00 24.99          N
ATOM   2070  CZ   ARG A 271      26.725  41.569  36.239  1.00 26.33          C
ATOM   2071  NH1  ARG A 271      26.511  42.458  37.199  1.00 24.40          N
ATOM   2072  NH2  ARG A 271      26.216  41.759  35.023  1.00 25.41          N
ATOM   2073  N    ALA A 272      33.195  39.599  40.350  1.00 23.18          N
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ATOM   2074  CA   ALA A 272      34.073  39.847  41.504  1.00 24.20           C
ATOM   2075  C    ALA A 272      35.436  40.365  41.015  1.00 25.66           C
ATOM   2076  O    ALA A 272      35.964  41.384  41.513  1.00 26.14           O
ATOM   2077  CB   ALA A 272      34.245  38.570  42.338  1.00 23.20           C
ATOM   2078  N    LYS A 273      36.004  39.716  40.003  1.00 26.78           N
ATOM   2079  CA   LYS A 273      37.308  40.177  39.503  1.00 26.19           C
ATOM   2080  C    LYS A 273      37.237  41.543  38.867  1.00 25.58           C
ATOM   2081  O    LYS A 273      38.160  42.344  38.992  1.00 25.79           O
ATOM   2082  CB   LYS A 273      37.888  39.173  38.502  1.00 27.23           C
ATOM   2083  CG   LYS A 273      38.088  37.811  39.087  1.00 29.49           C
ATOM   2084  CD   LYS A 273      38.359  36.780  38.007  1.00 30.35           C
ATOM   2085  CE   LYS A 273      39.057  35.561  38.606  1.00 32.46           C
ATOM   2086  NZ   LYS A 273      39.711  34.757  37.551  1.00 33.43           N
ATOM   2087  N    ALA A 274      36.143  41.823  38.172  1.00 24.96           N
ATOM   2088  CA   ALA A 274      35.982  43.126  37.539  1.00 24.84           C
ATOM   2089  C    ALA A 274      35.808  44.217  38.597  1.00 23.74           C
ATOM   2090  O    ALA A 274      36.293  45.334  38.440  1.00 23.00           O
ATOM   2091  CB   ALA A 274      34.757  43.114  36.590  1.00 22.94           C
ATOM   2092  N    TYR A 275      35.119  43.878  39.682  1.00 24.48           N
ATOM   2093  CA   TYR A 275      34.870  44.845  40.730  1.00 25.26           C
ATOM   2094  C    TYR A 275      36.111  45.108  41.616  1.00 26.25           C
ATOM   2095  O    TYR A 275      36.333  46.242  42.054  1.00 25.90           O
ATOM   2096  CB   TYR A 275      33.688  44.399  41.615  1.00 22.69           C
ATOM   2097  CG   TYR A 275      32.347  44.225  40.918  1.00 22.33           C
ATOM   2098  CD1  TYR A 275      32.053  44.894  39.728  1.00 23.40           C
ATOM   2099  CD2  TYR A 275      31.379  43.389  41.453  1.00 22.49           C
ATOM   2100  CE1  TYR A 275      30.808  44.718  39.076  1.00 21.15           C
ATOM   2101  CE2  TYR A 275      30.121  43.204  40.805  1.00 21.61           C
ATOM   2102  CZ   TYR A 275      29.867  43.871  39.626  1.00 22.47           C
ATOM   2103  OH   TYR A 275      28.655  43.673  38.973  1.00 24.36           O
ATOM   2104  N    ALA A 276      36.920  44.072  41.855  1.00 27.67           N
ATOM   2105  CA   ALA A 276      38.091  44.206  42.738  1.00 26.56           C
ATOM   2106  C    ALA A 276      38.824  45.544  42.840  1.00 27.09           C
ATOM   2107  O    ALA A 276      38.904  46.131  43.925  1.00 28.29           O
ATOM   2108  CB   ALA A 276      39.096  43.082  42.448  1.00 27.63           C
ATOM   2109  N    PRO A 277      39.346  46.065  41.738  1.00 27.02           N
ATOM   2110  CA   PRO A 277      40.068  47.345  41.788  1.00 27.42           C
ATOM   2111  C    PRO A 277      39.260  48.526  42.364  1.00 28.56           C
ATOM   2112  O    PRO A 277      39.810  49.636  42.583  1.00 28.93           O
ATOM   2113  CB   PRO A 277      40.419  47.615  40.316  1.00 27.08           C
ATOM   2114  CG   PRO A 277      40.295  46.290  39.638  1.00 26.79           C
ATOM   2115  CD   PRO A 277      39.119  45.651  40.344  1.00 27.73           C
ATOM   2116  N    PHE A 278      37.960  48.292  42.561  1.00 27.88           N
ATOM   2117  CA   PHE A 278      37.039  49.324  43.027  1.00 27.28           C
ATOM   2118  C    PHE A 278      36.350  48.915  44.331  1.00 27.77           C
ATOM   2119  O    PHE A 278      35.445  49.616  44.797  1.00 27.86           O
ATOM   2120  CB   PHE A 278      35.945  49.584  41.949  1.00 26.02           C
ATOM   2121  CG   PHE A 278      36.499  49.950  40.574  1.00 25.14           C
ATOM   2122  CD1  PHE A 278      36.957  51.238  40.302  1.00 25.85           C
ATOM   2123  CD2  PHE A 278      36.632  48.982  39.590  1.00 25.80           C
ATOM   2124  CE1  PHE A 278      37.545  51.561  39.073  1.00 26.00           C
ATOM   2125  CE2  PHE A 278      37.224  49.296  38.347  1.00 25.71           C
ATOM   2126  CZ   PHE A 278      37.679  50.579  38.091  1.00 25.31           C
ATOM   2127  N    ALA A 279      36.782  47.800  44.917  1.00 26.00           N
ATOM   2128  CA   ALA A 279      36.159  47.295  46.131  1.00 26.51           C
ATOM   2129  C    ALA A 279      37.084  46.884  47.274  1.00 26.83           C
ATOM   2130  O    ALA A 279      37.964  46.050  47.083  1.00 26.89           O
ATOM   2131  CB   ALA A 279      35.291  46.110  45.772  1.00 27.09           C
ATOM   2132  N    ASP A 280      36.835  47.411  48.475  1.00 27.48           N
ATOM   2133  CA   ASP A 280      37.633  47.063  49.664  1.00 27.53           C
ATOM   2134  C    ASP A 280      37.305  45.632  50.136  1.00 27.65           C
ATOM   2135  O    ASP A 280      38.150  44.932  50.730  1.00 28.49           O
ATOM   2136  CB   ASP A 280      37.388  48.099  50.788  1.00 26.27           C
ATOM   2137  CG   ASP A 280      37.887  49.485  50.419  1.00 26.67           C
ATOM   2138  OD1  ASP A 280      38.999  49.598  49.858  1.00 28.21           O
ATOM   2139  OD2  ASP A 280      37.189  50.495  50.680  1.00 26.49           O
ATOM   2140  N    LEU A 281      36.062  45.198  49.908  1.00 27.44           N
ATOM   2141  CA   LEU A 281      35.644  43.834  50.216  1.00 27.04           C
ATOM   2142  C    LEU A 281      34.688  43.447  49.107  1.00 26.89           C
ATOM   2143  O    LEU A 281      34.063  44.318  48.492  1.00 28.96           O
ATOM   2144  CB   LEU A 281      34.923  43.690  51.558  1.00 27.37           C
ATOM   2145  CG   LEU A 281      35.756  43.893  52.831  1.00 27.32           C
ATOM   2146  CD1  LEU A 281      35.631  45.322  53.240  1.00 26.75           C
ATOM   2147  CD2  LEU A 281      35.244  42.988  53.921  1.00 27.03           C
ATOM   2148  N    ILE A 282      34.587  42.154  48.855  1.00 25.91           N
ATOM   2149  CA   ILE A 282      33.711  41.658  47.824  1.00 26.09           C
ATOM   2150  C    ILE A 282      32.840  40.583  48.422  1.00 25.75           C
ATOM   2151  O    ILE A 282      33.273  39.733  49.207  1.00 24.09           O
ATOM   2152  CB   ILE A 282      34.477  41.093  46.620  1.00 25.88           C
ATOM   2153  CG1  ILE A 282      35.426  42.162  46.090  1.00 26.75           C
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ATOM   2154  CG2 ILE A 282      33.480  40.685  45.527  1.00 26.08           C
ATOM   2155  CD1 ILE A 282      36.044  41.835  44.756  1.00 28.75           C
ATOM   2156  N   TRP A 283      31.584  40.627  48.020  1.00 24.11           N
ATOM   2157  CA  TRP A 283      30.592  39.738  48.552  1.00 24.37           C
ATOM   2158  C   TRP A 283      29.706  39.175  47.464  1.00 24.24           C
ATOM   2159  O   TRP A 283      29.285  39.922  46.591  1.00 25.53           O
ATOM   2160  CB  TRP A 283      29.768  40.578  49.553  1.00 23.82           C
ATOM   2161  CG  TRP A 283      28.419  40.108  49.943  1.00 20.39           C
ATOM   2162  CD1 TRP A 283      27.932  38.845  49.886  1.00 19.59           C
ATOM   2163  CD2 TRP A 283      27.387  40.917  50.539  1.00 19.58           C
ATOM   2164  NE1 TRP A 283      26.663  38.806  50.400  1.00 17.74           N
ATOM   2165  CE2 TRP A 283      26.300  40.062  50.812  1.00 19.94           C
ATOM   2166  CE3 TRP A 283      27.288  42.271  50.869  1.00 18.63           C
ATOM   2167  CZ2 TRP A 283      25.112  40.510  51.400  1.00 18.01           C
ATOM   2168  CZ3 TRP A 283      26.075  42.737  51.472  1.00 17.49           C
ATOM   2169  CH2 TRP A 283      25.016  41.850  51.721  1.00 18.33           C
ATOM   2170  N   MET A 284      29.456  37.869  47.499  1.00 24.62           N
ATOM   2171  CA  MET A 284      28.514  37.271  46.556  1.00 23.90           C
ATOM   2172  C   MET A 284      27.423  36.562  47.356  1.00 23.35           C
ATOM   2173  O   MET A 284      27.692  35.823  48.308  1.00 20.84           O
ATOM   2174  CB  MET A 284      29.198  36.270  45.587  1.00 26.97           C
ATOM   2175  CG  MET A 284      29.487  34.901  46.159  1.00 27.34           C
ATOM   2176  SD  MET A 284      30.011  33.699  44.856  1.00 30.17           S
ATOM   2177  CE  MET A 284      28.658  32.675  44.859  1.00 23.43           C
ATOM   2178  N   GLU A 285      26.168  36.823  47.009  1.00 24.01           N
ATOM   2179  CA  GLU A 285      25.053  36.169  47.681  1.00 25.03           C
ATOM   2180  C   GLU A 285      24.976  34.733  47.187  1.00 25.82           C
ATOM   2181  O   GLU A 285      25.249  34.468  46.023  1.00 26.78           O
ATOM   2182  CB  GLU A 285      23.752  36.881  47.355  1.00 25.48           C
ATOM   2183  CG  GLU A 285      23.612  38.237  48.030  1.00 27.29           C
ATOM   2184  CD  GLU A 285      23.139  38.142  49.483  1.00 28.80           C
ATOM   2185  OE1 GLU A 285      23.888  37.600  50.339  1.00 24.61           O
ATOM   2186  OE2 GLU A 285      22.010  38.633  49.759  1.00 27.39           O
ATOM   2187  N   THR A 286      24.573  33.823  48.064  1.00 27.58           N
ATOM   2188  CA  THR A 286      24.470  32.409  47.711  1.00 29.13           C
ATOM   2189  C   THR A 286      23.129  31.862  48.134  1.00 28.32           C
ATOM   2190  O   THR A 286      22.483  32.412  49.026  1.00 30.77           O
ATOM   2191  CB  THR A 286      25.619  31.570  48.368  1.00 31.90           C
ATOM   2192  OG1 THR A 286      25.592  31.716  49.793  1.00 31.64           O
ATOM   2193  CG2 THR A 286      26.967  32.050  47.865  1.00 33.52           C
ATOM   2194  N   GLY A 287      22.698  30.787  47.490  1.00 27.27           N
ATOM   2195  CA  GLY A 287      21.405  30.210  47.802  1.00 27.39           C
ATOM   2196  C   GLY A 287      21.353  29.295  49.008  1.00 27.51           C
ATOM   2197  O   GLY A 287      20.265  28.910  49.452  1.00 25.92           O
ATOM   2198  N   THR A 288      22.525  28.949  49.533  1.00 28.22           N
ATOM   2199  CA  THR A 288      22.622  28.070  50.712  1.00 29.25           C
ATOM   2200  C   THR A 288      23.913  28.371  51.469  1.00 27.92           C
ATOM   2201  O   THR A 288      24.859  28.912  50.907  1.00 27.79           O
ATOM   2202  CB  THR A 288      22.713  26.568  50.322  1.00 30.12           C
ATOM   2203  OG1 THR A 288      23.848  26.375  49.472  1.00 33.33           O
ATOM   2204  CG2 THR A 288      21.474  26.101  49.610  1.00 32.94           C
ATOM   2205  N   PRO A 289      23.970  28.031  52.768  1.00 28.08           N
ATOM   2206  CA  PRO A 289      25.218  28.302  53.490  1.00 29.52           C
ATOM   2207  C   PRO A 289      26.118  27.088  53.181  1.00 31.34           C
ATOM   2208  O   PRO A 289      25.953  26.021  53.773  1.00 32.01           O
ATOM   2209  CB  PRO A 289      24.768  28.381  54.945  1.00 27.35           C
ATOM   2210  CG  PRO A 289      23.591  27.454  55.016  1.00 28.30           C
ATOM   2211  CD  PRO A 289      22.921  27.484  53.643  1.00 27.06           C
ATOM   2212  N   ASP A 290      27.048  27.263  52.244  1.00 33.06           N
ATOM   2213  CA  ASP A 290      27.921  26.174  51.775  1.00 33.31           C
ATOM   2214  C   ASP A 290      29.393  26.542  51.821  1.00 33.34           C
ATOM   2215  O   ASP A 290      29.865  27.355  51.022  1.00 34.44           O
ATOM   2216  CB  ASP A 290      27.559  25.823  50.321  1.00 34.15           C
ATOM   2217  CG  ASP A 290      28.239  24.531  49.825  1.00 36.27           C
ATOM   2218  OD1 ASP A 290      29.408  24.278  50.195  1.00 34.28           O
ATOM   2219  OD2 ASP A 290      27.597  23.776  49.052  1.00 36.69           O
ATOM   2220  N   LEU A 291      30.128  25.911  52.732  1.00 33.37           N
ATOM   2221  CA  LEU A 291      31.562  26.170  52.881  1.00 32.41           C
ATOM   2222  C   LEU A 291      32.343  25.879  51.600  1.00 33.46           C
ATOM   2223  O   LEU A 291      33.351  26.530  51.287  1.00 31.95           O
ATOM   2224  CB  LEU A 291      32.100  25.324  54.042  1.00 31.68           C
ATOM   2225  CG  LEU A 291      31.640  25.853  55.412  1.00 31.34           C
ATOM   2226  CD1 LEU A 291      32.127  24.992  56.526  1.00 31.69           C
ATOM   2227  CD2 LEU A 291      32.161  27.284  55.557  1.00 30.98           C
ATOM   2228  N   GLU A 292      31.857  24.889  50.860  1.00 34.73           N
ATOM   2229  CA  GLU A 292      32.493  24.477  49.619  1.00 37.76           C
ATOM   2230  C   GLU A 292      32.418  25.593  48.587  1.00 36.32           C
ATOM   2231  O   GLU A 292      33.440  26.128  48.131  1.00 37.06           O
ATOM   2232  CB  GLU A 292      31.802  23.213  49.083  1.00 41.05           C
ATOM   2233  CG  GLU A 292      32.759  22.051  48.864  1.00 46.35           C
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| ATOM | 2234 | CD | GLU A 292 | 34.078 | 22.513 | 48.238 | 1.00 48.82 | C |
|------|------|------|-----------|--------|--------|--------|------------|---|
| ATOM | 2235 | OE1 | GLU A 292 | 34.050 | 23.061 | 47.106 | 1.00 49.89 | O |
| ATOM | 2236 | OE2 | GLU A 292 | 35.138 | 22.339 | 48.891 | 1.00 49.97 | O |
| ATOM | 2237 | N | ALA A 293 | 31.191 | 25.945 | 48.235 | 1.00 35.33 | N |
| ATOM | 2238 | CA | ALA A 293 | 30.944 | 26.996 | 47.266 | 1.00 33.51 | C |
| ATOM | 2239 | C | ALA A 293 | 31.736 | 28.248 | 47.637 | 1.00 32.61 | C |
| ATOM | 2240 | O | ALA A 293 | 32.274 | 28.934 | 46.763 | 1.00 31.45 | O |
| ATOM | 2241 | CB | ALA A 293 | 29.446 | 27.305 | 47.219 | 1.00 34.51 | C |
| ATOM | 2242 | N | ALA A 294 | 31.822 | 28.532 | 48.937 | 1.00 32.07 | N |
| ATOM | 2243 | CA | ALA A 294 | 32.548 | 29.710 | 49.404 | 1.00 32.48 | C |
| ATOM | 2244 | C | ALA A 294 | 34.044 | 29.634 | 49.068 | 1.00 32.59 | C |
| ATOM | 2245 | O | ALA A 294 | 34.655 | 30.606 | 48.601 | 1.00 33.62 | O |
| ATOM | 2246 | CB | ALA A 294 | 32.344 | 29.864 | 50.926 | 1.00 33.45 | C |
| ATOM | 2247 | N | ARG A 295 | 34.633 | 28.467 | 49.297 | 1.00 34.14 | N |
| ATOM | 2248 | CA | ARG A 295 | 36.057 | 28.249 | 49.031 | 1.00 34.42 | C |
| ATOM | 2249 | C | ARG A 295 | 36.327 | 28.481 | 47.553 | 1.00 34.17 | C |
| ATOM | 2250 | O | ARG A 295 | 37.272 | 29.192 | 47.174 | 1.00 34.40 | O |
| ATOM | 2251 | CB | ARG A 295 | 36.441 | 26.809 | 49.416 | 1.00 36.47 | C |
| ATOM | 2252 | CG | ARG A 295 | 37.946 | 26.552 | 49.599 | 1.00 38.82 | C |
| ATOM | 2253 | CD | ARG A 295 | 38.252 | 25.033 | 49.738 | 1.00 40.94 | C |
| ATOM | 2254 | NE | ARG A 295 | 37.412 | 24.343 | 50.727 | 1.00 44.08 | N |
| ATOM | 2255 | CZ | ARG A 295 | 37.540 | 24.466 | 52.051 | 1.00 45.94 | C |
| ATOM | 2256 | NH1 | ARG A 295 | 38.488 | 25.250 | 52.562 | 1.00 46.56 | N |
| ATOM | 2257 | NH2 | ARG A 295 | 36.701 | 23.831 | 52.875 | 1.00 45.76 | N |
| ATOM | 2258 | N | GLN A 296 | 35.458 | 27.907 | 46.719 | 1.00 34.32 | N |
| ATOM | 2259 | CA | GLN A 296 | 35.581 | 28.045 | 45.272 | 1.00 34.30 | C |
| ATOM | 2260 | C | GLN A 296 | 35.680 | 29.510 | 44.849 | 1.00 34.19 | C |
| ATOM | 2261 | O | GLN A 296 | 36.624 | 29.909 | 44.142 | 1.00 33.47 | O |
| ATOM | 2262 | CB | GLN A 296 | 34.384 | 27.388 | 44.599 | 1.00 35.62 | C |
| ATOM | 2263 | CG | GLN A 296 | 34.541 | 27.215 | 43.103 | 1.00 39.32 | C |
| ATOM | 2264 | CD | GLN A 296 | 33.338 | 26.546 | 42.496 | 1.00 40.64 | C |
| ATOM | 2265 | OE1 | GLN A 296 | 32.451 | 26.077 | 43.213 | 1.00 40.35 | O |
| ATOM | 2266 | NE2 | GLN A 296 | 33.301 | 26.482 | 41.166 | 1.00 42.04 | N |
| ATOM | 2267 | N | PHE A 297 | 34.706 | 30.308 | 45.303 | 1.00 33.39 | N |
| ATOM | 2268 | CA | PHE A 297 | 34.632 | 31.735 | 44.981 | 1.00 32.01 | C |
| ATOM | 2269 | C | PHE A 297 | 35.891 | 32.428 | 45.479 | 1.00 31.89 | C |
| ATOM | 2270 | O | PHE A 297 | 36.499 | 33.233 | 44.774 | 1.00 31.61 | O |
| ATOM | 2271 | CB | PHE A 297 | 33.373 | 32.354 | 45.646 | 1.00 31.87 | C |
| ATOM | 2272 | CG | PHE A 297 | 33.277 | 33.867 | 45.535 | 1.00 31.46 | C |
| ATOM | 2273 | CD1 | PHE A 297 | 33.009 | 34.486 | 44.315 | 1.00 30.76 | C |
| ATOM | 2274 | CD2 | PHE A 297 | 33.463 | 34.673 | 46.666 | 1.00 31.62 | C |
| ATOM | 2275 | CE1 | PHE A 297 | 32.928 | 35.875 | 44.206 | 1.00 29.23 | C |
| ATOM | 2276 | CE2 | PHE A 297 | 33.391 | 36.068 | 46.576 | 1.00 30.43 | C |
| ATOM | 2277 | CZ | PHE A 297 | 33.120 | 36.674 | 45.333 | 1.00 31.42 | C |
| ATOM | 2278 | N | SER A 298 | 36.273 | 32.079 | 46.700 | 1.00 32.77 | N |
| ATOM | 2279 | CA | SER A 298 | 37.433 | 32.656 | 47.354 | 1.00 33.67 | C |
| ATOM | 2280 | C | SER A 298 | 38.747 | 32.420 | 46.611 | 1.00 33.23 | C |
| ATOM | 2281 | O | SER A 298 | 39.489 | 33.371 | 46.291 | 1.00 32.53 | O |
| ATOM | 2282 | CB | SER A 298 | 37.542 | 32.088 | 48.768 | 1.00 34.90 | C |
| ATOM | 2283 | OG | SER A 298 | 38.737 | 32.547 | 49.363 | 1.00 39.16 | O |
| ATOM | 2284 | N | GLU A 299 | 39.044 | 31.156 | 46.349 | 1.00 33.37 | N |
| ATOM | 2285 | CA | GLU A 299 | 40.287 | 30.834 | 45.652 | 1.00 35.15 | C |
| ATOM | 2286 | C | GLU A 299 | 40.283 | 31.478 | 44.270 | 1.00 34.42 | C |
| ATOM | 2287 | O | GLU A 299 | 41.259 | 32.115 | 43.863 | 1.00 35.34 | O |
| ATOM | 2288 | CB | GLU A 299 | 40.461 | 29.320 | 45.558 | 1.00 34.43 | C |
| ATOM | 2289 | CG | GLU A 299 | 40.416 | 28.661 | 46.940 | 1.00 37.55 | C |
| ATOM | 2290 | CD | GLU A 299 | 40.757 | 27.172 | 46.944 | 1.00 40.70 | C |
| ATOM | 2291 | OE1 | GLU A 299 | 40.505 | 26.463 | 45.927 | 1.00 41.98 | O |
| ATOM | 2292 | OE2 | GLU A 299 | 41.265 | 26.710 | 47.995 | 1.00 40.64 | O |
| ATOM | 2293 | N | ALA A 300 | 39.163 | 31.352 | 43.570 | 1.00 34.76 | N |
| ATOM | 2294 | CA | ALA A 300 | 39.054 | 31.927 | 42.249 | 1.00 32.58 | C |
| ATOM | 2295 | C | ALA A 300 | 39.425 | 33.393 | 42.265 | 1.00 32.44 | C |
| ATOM | 2296 | O | ALA A 300 | 40.212 | 33.839 | 41.427 | 1.00 31.68 | O |
| ATOM | 2297 | CB | ALA A 300 | 37.654 | 31.737 | 41.712 | 1.00 34.40 | C |
| ATOM | 2298 | N | VAL A 301 | 38.893 | 34.159 | 43.221 | 1.00 31.19 | N |
| ATOM | 2299 | CA | VAL A 301 | 39.211 | 35.577 | 43.267 | 1.00 30.68 | C |
| ATOM | 2300 | C | VAL A 301 | 40.647 | 35.894 | 43.705 | 1.00 32.02 | C |
| ATOM | 2301 | O | VAL A 301 | 41.307 | 36.761 | 43.113 | 1.00 31.63 | O |
| ATOM | 2302 | CB | VAL A 301 | 38.235 | 36.372 | 44.208 | 1.00 30.74 | C |
| ATOM | 2303 | CG1 | VAL A 301 | 38.671 | 37.842 | 44.284 | 1.00 30.07 | C |
| ATOM | 2304 | CG2 | VAL A 301 | 36.806 | 36.292 | 43.683 | 1.00 27.82 | C |
| ATOM | 2305 | N | LYS A 302 | 41.114 | 35.205 | 44.748 | 1.00 33.20 | N |
| ATOM | 2306 | CA | LYS A 302 | 42.449 | 35.442 | 45.285 | 1.00 35.36 | C |
| ATOM | 2307 | C | LYS A 302 | 43.514 | 34.959 | 44.311 | 1.00 36.73 | C |
| ATOM | 2308 | O | LYS A 302 | 44.676 | 35.375 | 44.374 | 1.00 37.12 | O |
| ATOM | 2309 | CB | LYS A 302 | 42.587 | 34.770 | 46.653 | 1.00 34.94 | C |
| ATOM | 2310 | CG | LYS A 302 | 41.774 | 35.470 | 47.753 | 1.00 34.60 | C |
| ATOM | 2311 | CD | LYS A 302 | 41.859 | 34.737 | 49.077 | 1.00 34.21 | C |
| ATOM | 2312 | CE | LYS A 302 | 41.396 | 35.620 | 50.229 | 1.00 34.74 | C |
| ATOM | 2313 | NZ | LYS A 302 | 42.181 | 36.886 | 50.344 | 1.00 34.43 | N |

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ATOM   2314  N    ALA A 303     43.092  34.088  43.403  1.00 38.12           N
ATOM   2315  CA   ALA A 303     43.980  33.574  42.386  1.00 38.87           C
ATOM   2316  C    ALA A 303     44.450  34.754  41.557  1.00 39.55           C
ATOM   2317  O    ALA A 303     45.530  34.726  41.006  1.00 40.28           O
ATOM   2318  CB   ALA A 303     43.249  32.582  41.510  1.00 38.40           C
ATOM   2319  N    GLU A 304     43.655  35.815  41.496  1.00 40.14           N
ATOM   2320  CA   GLU A 304     44.038  36.968  40.699  1.00 40.69           C
ATOM   2321  C    GLU A 304     44.300  38.200  41.544  1.00 40.07           C
ATOM   2322  O    GLU A 304     45.064  39.080  41.151  1.00 40.56           O
ATOM   2323  CB   GLU A 304     42.953  37.253  39.662  1.00 43.22           C
ATOM   2324  CG   GLU A 304     43.276  38.387  38.711  1.00 47.70           C
ATOM   2325  CD   GLU A 304     42.484  38.279  37.413  1.00 50.30           C
ATOM   2326  OE1  GLU A 304     41.263  37.998  37.473  1.00 51.88           O
ATOM   2327  OE2  GLU A 304     43.079  38.479  36.333  1.00 52.22           O
ATOM   2328  N    TYR A 305     43.646  38.265  42.699  1.00 38.97           N
ATOM   2329  CA   TYR A 305     43.812  39.373  43.645  1.00 37.79           C
ATOM   2330  C    TYR A 305     44.051  38.690  44.993  1.00 37.83           C
ATOM   2331  O    TYR A 305     43.125  38.432  45.759  1.00 37.82           O
ATOM   2332  CB   TYR A 305     42.546  40.229  43.667  1.00 36.39           C
ATOM   2333  CG   TYR A 305     42.329  40.983  42.375  1.00 35.38           C
ATOM   2334  CD1  TYR A 305     43.016  42.167  42.112  1.00 35.41           C
ATOM   2335  CD2  TYR A 305     41.464  40.495  41.402  1.00 34.95           C
ATOM   2336  CE1  TYR A 305     42.847  42.849  40.905  1.00 36.06           C
ATOM   2337  CE2  TYR A 305     41.286  41.161  40.196  1.00 35.15           C
ATOM   2338  CZ   TYR A 305     41.976  42.332  39.947  1.00 34.06           C
ATOM   2339  OH   TYR A 305     41.828  42.957  38.736  1.00 34.85           O
ATOM   2340  N    PRO A 306     45.316  38.371  45.286  1.00 38.01           N
ATOM   2341  CA   PRO A 306     45.703  37.697  46.525  1.00 37.91           C
ATOM   2342  C    PRO A 306     45.291  38.393  47.808  1.00 36.30           C
ATOM   2343  O    PRO A 306     44.837  37.731  48.738  1.00 37.27           O
ATOM   2344  CB   PRO A 306     47.221  37.577  46.397  1.00 36.90           C
ATOM   2345  CG   PRO A 306     47.459  37.646  44.937  1.00 37.64           C
ATOM   2346  CD   PRO A 306     46.515  38.727  44.510  1.00 37.85           C
ATOM   2347  N    ASP A 307     45.442  39.713  47.844  1.00 35.88           N
ATOM   2348  CA   ASP A 307     45.102  40.494  49.031  1.00 35.30           C
ATOM   2349  C    ASP A 307     43.645  40.964  49.154  1.00 35.89           C
ATOM   2350  O    ASP A 307     43.305  41.663  50.122  1.00 35.74           O
ATOM   2351  CB   ASP A 307     46.015  41.720  49.120  1.00 36.76           C
ATOM   2352  CG   ASP A 307     47.464  41.356  49.411  1.00 37.92           C
ATOM   2353  OD1  ASP A 307     47.712  40.197  49.812  1.00 36.10           O
ATOM   2354  OD2  ASP A 307     48.341  42.242  49.253  1.00 38.85           O
ATOM   2355  N    GLN A 308     42.796  40.604  48.191  1.00 33.70           N
ATOM   2356  CA   GLN A 308     41.392  41.016  48.219  1.00 32.76           C
ATOM   2357  C    GLN A 308     40.600  40.394  49.351  1.00 31.47           C
ATOM   2358  O    GLN A 308     40.462  39.178  49.407  1.00 32.63           O
ATOM   2359  CB   GLN A 308     40.695  40.665  46.891  1.00 32.45           C
ATOM   2360  CG   GLN A 308     39.233  41.128  46.775  1.00 29.08           C
ATOM   2361  CD   GLN A 308     39.067  42.663  46.962  1.00 30.07           C
ATOM   2362  OE1  GLN A 308     38.367  43.099  47.875  1.00 32.47           O
ATOM   2363  NE2  GLN A 308     39.712  43.464  46.119  1.00 26.41           N
ATOM   2364  N    MET A 309     40.072  41.225  50.253  1.00 31.05           N
ATOM   2365  CA   MET A 309     39.258  40.706  51.350  1.00 30.18           C
ATOM   2366  C    MET A 309     37.838  40.469  50.841  1.00 29.24           C
ATOM   2367  O    MET A 309     37.353  41.195  49.966  1.00 28.06           O
ATOM   2368  CB   MET A 309     39.196  41.690  52.519  1.00 30.95           C
ATOM   2369  CG   MET A 309     40.533  41.968  53.194  1.00 33.10           C
ATOM   2370  SD   MET A 309     40.296  42.839  54.760  1.00 33.63           S
ATOM   2371  CE   MET A 309     40.514  44.494  54.231  1.00 33.01           C
ATOM   2372  N    LEU A 310     37.190  39.468  51.418  1.00 28.85           N
ATOM   2373  CA   LEU A 310     35.820  39.073  51.080  1.00 28.25           C
ATOM   2374  C    LEU A 310     34.827  39.274  52.250  1.00 27.26           C
ATOM   2375  O    LEU A 310     35.227  39.387  53.419  1.00 25.62           O
ATOM   2376  CB   LEU A 310     35.825  37.597  50.661  1.00 29.34           C
ATOM   2377  CG   LEU A 310     36.853  37.267  49.573  1.00 29.52           C
ATOM   2378  CD1  LEU A 310     36.757  35.827  49.233  1.00 29.31           C
ATOM   2379  CD2  LEU A 310     36.621  38.124  48.336  1.00 30.86           C
ATOM   2380  N    ALA A 311     33.535  39.333  51.933  1.00 26.38           N
ATOM   2381  CA   ALA A 311     32.509  39.477  52.962  1.00 25.32           C
ATOM   2382  C    ALA A 311     31.485  38.378  52.724  1.00 24.42           C
ATOM   2383  O    ALA A 311     31.256  37.964  51.579  1.00 25.45           O
ATOM   2384  CB   ALA A 311     31.847  40.855  52.885  1.00 24.81           C
ATOM   2385  N    TYR A 312     30.889  37.880  53.797  1.00 23.66           N
ATOM   2386  CA   TYR A 312     29.922  36.815  53.681  1.00 22.87           C
ATOM   2387  C    TYR A 312     28.694  37.091  54.508  1.00 23.46           C
ATOM   2388  O    TYR A 312     28.783  37.602  55.623  1.00 24.52           O
ATOM   2389  CB   TYR A 312     30.569  35.466  54.090  1.00 22.33           C
ATOM   2390  CG   TYR A 312     29.778  34.247  53.701  1.00 22.38           C
ATOM   2391  CD1  TYR A 312     28.680  33.833  54.459  1.00 21.13           C
ATOM   2392  CD2  TYR A 312     30.096  33.527  52.550  1.00 21.14           C
ATOM   2393  CE1  TYR A 312     27.930  32.763  54.101  1.00 21.61           C
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| ATOM | 2394 | CE2 | TYR A 312 | 29.325 | 32.410 | 52.164 | 1.00 22.44 | C |
|------|------|-----|-----------|--------|--------|--------|-------------|---|
| ATOM | 2395 | CZ | TYR A 312 | 28.248 | 32.039 | 52.946 | 1.00 22.94 | C |
| ATOM | 2396 | OH | TYR A 312 | 27.480 | 30.953 | 52.611 | 1.00 22.14 | O |
| ATOM | 2397 | N | ASN A 313 | 27.539 | 36.761 | 53.944 | 1.00 23.39 | N |
| ATOM | 2398 | CA | ASN A 313 | 26.254 | 36.961 | 54.591 | 1.00 22.35 | C |
| ATOM | 2399 | C | ASN A 313 | 25.724 | 35.660 | 55.179 | 1.00 23.73 | C |
| ATOM | 2400 | O | ASN A 313 | 25.266 | 34.777 | 54.444 | 1.00 24.30 | O |
| ATOM | 2401 | CB | ASN A 313 | 25.241 | 37.563 | 53.552 | 1.00 22.48 | C |
| ATOM | 2402 | CG | ASN A 313 | 23.808 | 37.596 | 54.070 | 1.00 22.34 | C |
| ATOM | 2403 | OD1 | ASN A 313 | 23.563 | 37.404 | 55.251 | 1.00 22.05 | O |
| ATOM | 2404 | ND2 | ASN A 313 | 22.849 | 37.844 | 53.173 | 1.00 21.74 | N |
| ATOM | 2405 | N | CYS A 314 | 25.807 | 35.518 | 56.511 | 1.00 23.65 | N |
| ATOM | 2406 | CA | CYS A 314 | 25.270 | 34.328 | 57.176 | 1.00 22.82 | C |
| ATOM | 2407 | C | CYS A 314 | 23.795 | 34.681 | 57.363 | 1.00 22.45 | C |
| ATOM | 2408 | O | CYS A 314 | 23.361 | 35.091 | 58.443 | 1.00 21.77 | O |
| ATOM | 2409 | CB | CYS A 314 | 25.974 | 34.088 | 58.526 | 1.00 22.90 | C |
| ATOM | 2410 | SG | CYS A 314 | 27.782 | 33.986 | 58.330 | 1.00 26.54 | S |
| ATOM | 2411 | N | SER A 315 | 23.026 | 34.512 | 56.291 | 1.00 22.59 | N |
| ATOM | 2412 | CA | SER A 315 | 21.617 | 34.895 | 56.268 | 1.00 22.39 | C |
| ATOM | 2413 | C | SER A 315 | 20.538 | 34.103 | 56.951 | 1.00 22.58 | C |
| ATOM | 2414 | O | SER A 315 | 20.522 | 32.867 | 56.886 | 1.00 24.03 | O |
| ATOM | 2415 | CB | SER A 315 | 21.177 | 35.096 | 54.810 | 1.00 22.87 | C |
| ATOM | 2416 | OG | SER A 315 | 19.787 | 35.496 | 54.736 | 1.00 24.26 | O |
| ATOM | 2417 | N | PRO A 316 | 19.622 | 34.799 | 57.667 | 1.00 20.99 | N |
| ATOM | 2418 | CA | PRO A 316 | 18.521 | 34.116 | 58.336 | 1.00 21.00 | C |
| ATOM | 2419 | C | PRO A 316 | 17.551 | 33.582 | 57.287 | 1.00 19.71 | C |
| ATOM | 2420 | O | PRO A 316 | 16.595 | 32.861 | 57.623 | 1.00 21.71 | O |
| ATOM | 2421 | CB | PRO A 316 | 17.866 | 35.213 | 59.177 | 1.00 19.79 | C |
| ATOM | 2422 | CG | PRO A 316 | 19.036 | 36.036 | 59.599 | 1.00 20.94 | C |
| ATOM | 2423 | CD | PRO A 316 | 19.844 | 36.129 | 58.278 | 1.00 22.44 | C |
| ATOM | 2424 | N | SER A 317 | 17.770 | 33.978 | 56.029 | 1.00 20.56 | N |
| ATOM | 2425 | CA | SER A 317 | 16.942 | 33.515 | 54.936 | 1.00 19.37 | C |
| ATOM | 2426 | C | SER A 317 | 17.305 | 32.043 | 54.618 | 1.00 20.82 | C |
| ATOM | 2427 | O | SER A 317 | 16.668 | 31.421 | 53.790 | 1.00 19.61 | O |
| ATOM | 2428 | CB | SER A 317 | 17.116 | 34.387 | 53.684 | 1.00 19.33 | C |
| ATOM | 2429 | OG | SER A 317 | 16.580 | 35.698 | 53.893 | 1.00 21.72 | O |
| ATOM | 2430 | N | PHE A 318 | 18.339 | 31.515 | 55.262 | 1.00 21.51 | N |
| ATOM | 2431 | CA | PHE A 318 | 18.694 | 30.099 | 55.087 | 1.00 22.96 | C |
| ATOM | 2432 | C | PHE A 318 | 18.073 | 29.326 | 56.243 | 1.00 26.35 | C |
| ATOM | 2433 | O | PHE A 318 | 17.981 | 29.854 | 57.365 | 1.00 27.50 | O |
| ATOM | 2434 | CB | PHE A 318 | 20.195 | 29.876 | 55.174 | 1.00 21.27 | C |
| ATOM | 2435 | CG | PHE A 318 | 20.984 | 30.582 | 54.135 | 1.00 22.27 | C |
| ATOM | 2436 | CD1 | PHE A 318 | 20.515 | 30.684 | 52.832 | 1.00 20.68 | C |
| ATOM | 2437 | CD2 | PHE A 318 | 22.242 | 31.140 | 54.457 | 1.00 20.12 | C |
| ATOM | 2438 | CE1 | PHE A 318 | 21.275 | 31.326 | 51.856 | 1.00 23.29 | C |
| ATOM | 2439 | CE2 | PHE A 318 | 23.003 | 31.779 | 53.496 | 1.00 22.60 | C |
| ATOM | 2440 | CZ | PHE A 318 | 22.519 | 31.872 | 52.181 | 1.00 22.92 | C |
| ATOM | 2441 | N | ASN A 319 | 17.611 | 28.099 | 55.993 | 1.00 27.04 | N |
| ATOM | 2442 | CA | ASN A 319 | 17.096 | 27.260 | 57.082 | 1.00 28.77 | C |
| ATOM | 2443 | C | ASN A 319 | 18.393 | 26.528 | 57.422 | 1.00 31.01 | C |
| ATOM | 2444 | O | ASN A 319 | 18.717 | 25.510 | 56.790 | 1.00 30.72 | O |
| ATOM | 2445 | CB | ASN A 319 | 16.046 | 26.269 | 56.562 | 1.00 29.94 | C |
| ATOM | 2446 | CG | ASN A 319 | 15.577 | 25.320 | 57.618 | 1.00 31.61 | C |
| ATOM | 2447 | OD1 | ASN A 319 | 14.449 | 24.822 | 57.560 | 1.00 33.34 | O |
| ATOM | 2448 | ND2 | ASN A 319 | 16.426 | 25.057 | 58.602 | 1.00 31.24 | N |
| ATOM | 2449 | N | TRP A 320 | 19.151 | 27.057 | 58.385 | 1.00 30.26 | N |
| ATOM | 2450 | CA | TRP A 320 | 20.462 | 26.479 | 58.711 | 1.00 32.02 | C |
| ATOM | 2451 | C | TRP A 320 | 20.556 | 24.983 | 59.030 | 1.00 33.57 | C |
| ATOM | 2452 | O | TRP A 320 | 21.369 | 24.279 | 58.411 | 1.00 33.34 | O |
| ATOM | 2453 | CB | TRP A 320 | 21.141 | 27.296 | 59.812 | 1.00 28.62 | C |
| ATOM | 2454 | CG | TRP A 320 | 21.535 | 28.632 | 59.301 | 1.00 28.84 | C |
| ATOM | 2455 | CD1 | TRP A 320 | 20.704 | 29.701 | 59.086 | 1.00 29.02 | C |
| ATOM | 2456 | CD2 | TRP A 320 | 22.840 | 29.050 | 58.885 | 1.00 26.68 | C |
| ATOM | 2457 | NE1 | TRP A 320 | 21.415 | 30.759 | 58.564 | 1.00 25.89 | N |
| ATOM | 2458 | CE2 | TRP A 320 | 22.724 | 30.391 | 58.429 | 1.00 27.39 | C |
| ATOM | 2459 | CE3 | TRP A 320 | 24.093 | 28.431 | 58.848 | 1.00 27.35 | C |
| ATOM | 2460 | CZ2 | TRP A 320 | 23.808 | 31.118 | 57.943 | 1.00 27.30 | C |
| ATOM | 2461 | CZ3 | TRP A 320 | 25.185 | 29.161 | 58.358 | 1.00 28.22 | C |
| ATOM | 2462 | CH2 | TRP A 320 | 25.031 | 30.495 | 57.911 | 1.00 29.55 | C |
| ATOM | 2463 | N | LYS A 321 | 19.745 | 24.485 | 59.959 | 1.00 35.15 | N |
| ATOM | 2464 | CA | LYS A 321 | 19.841 | 23.065 | 60.258 | 1.00 37.54 | C |
| ATOM | 2465 | C | LYS A 321 | 19.343 | 22.162 | 59.125 | 1.00 38.64 | C |
| ATOM | 2466 | O | LYS A 321 | 19.664 | 20.975 | 59.086 | 1.00 38.17 | O |
| ATOM | 2467 | CB | LYS A 321 | 19.141 | 22.742 | 61.580 | 1.00 37.01 | C |
| ATOM | 2468 | CG | LYS A 321 | 20.027 | 23.067 | 62.783 | 1.00 37.26 | C |
| ATOM | 2469 | CD | LYS A 321 | 19.358 | 22.781 | 64.122 | 1.00 37.87 | C |
| ATOM | 2470 | CE | LYS A 321 | 19.183 | 21.290 | 64.377 | 1.00 41.16 | C |
| ATOM | 2471 | NZ | LYS A 321 | 20.478 | 20.567 | 64.392 | 1.00 41.97 | N |
| ATOM | 2472 | N | LYS A 322 | 18.575 | 22.712 | 58.188 | 1.00 40.13 | N |
| ATOM | 2473 | CA | LYS A 322 | 18.115 | 21.884 | 57.084 | 1.00 40.96 | C |

| ATOM | 2474 | C | LYS A 322 | 19.278 | 21.566 | 56.144 | 1.00 | 40.76 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2475 | O | LYS A 322 | 19.259 | 20.544 | 55.458 | 1.00 | 40.63 | O |
| ATOM | 2476 | CB | LYS A 322 | 16.986 | 22.563 | 56.304 | 1.00 | 41.61 | C |
| ATOM | 2477 | CG | LYS A 322 | 16.668 | 21.846 | 54.994 | 1.00 | 43.12 | C |
| ATOM | 2478 | CD | LYS A 322 | 15.455 | 22.409 | 54.265 | 1.00 | 44.87 | C |
| ATOM | 2479 | CE | LYS A 322 | 15.139 | 21.547 | 53.036 | 1.00 | 46.46 | C |
| ATOM | 2480 | NZ | LYS A 322 | 13.872 | 21.923 | 52.349 | 1.00 | 48.39 | N |
| ATOM | 2481 | N | HIS A 323 | 20.297 | 22.423 | 56.128 | 1.00 | 40.67 | N |
| ATOM | 2482 | CA | HIS A 323 | 21.454 | 22.223 | 55.256 | 1.00 | 41.85 | C |
| ATOM | 2483 | C | HIS A 323 | 22.727 | 21.787 | 55.947 | 1.00 | 41.52 | C |
| ATOM | 2484 | O | HIS A 323 | 23.557 | 21.114 | 55.341 | 1.00 | 40.66 | O |
| ATOM | 2485 | CB | HIS A 323 | 21.786 | 23.505 | 54.480· | 1.00 | 44.05 | C |
| ATOM | 2486 | CG | HIS A 323 | 20.677 | 23.970 | 53.592 | 1.00 | 47.25 | C |
| ATOM | 2487 | ND1 | HIS A 323 | 20.425 | 23.406 | 52.359 | 1.00 | 47.99 | N |
| ATOM | 2488 | CD2 | HIS A 323 | 19.685 | 24.868 | 53.806 | 1.00 | 48.62 | C |
| ATOM | 2489 | CE1 | HIS A 323 | 19.322 | 23.930 | 51.855 | 1.00 | 49.07 | C |
| ATOM | 2490 | NE2 | HIS A 323 | 18.852 | 24.819 | 52.715 | 1.00 | 50.20 | N |
| ATOM | 2491 | N | LEU A 324 | 22.898 | 22.171 | 57.206 | 1.00 | 40.24 | N |
| ATOM | 2492 | CA | LEU A 324 | 24.129 | 21.839 | 57.910 | 1.00 | 39.58 | C |
| ATOM | 2493 | C | LEU A 324 | 23.898 | 21.103 | 59.220 | 1.00 | 39.12 | C |
| ATOM | 2494 | O | LEU A 324 | 22.817 | 21.167 | 59.784 | 1.00 | 38.49 | O |
| ATOM | 2495 | CB | LEU A 324 | 24.911 | 23.126 | 58.182 | 1.00 | 39.14 | C |
| ATOM | 2496 | CG | LEU A 324 | 25.274 | 23.969 | 56.960 | 1.00 | 38.23 | C |
| ATOM | 2497 | CD1 | LEU A 324 | 25.895 | 25.272 | 57.416 | 1.00 | 38.75 | C |
| ATOM | 2498 | CD2 | LEU A 324 | 26.250 | 23.233 | 56.081 | 1.00 | 39.23 | C |
| ATOM | 2499 | N | ASP A 325 | 24.920 | 20.384 | 59.682 | 1.00 | 38.73 | N |
| ATOM | 2500 | CA | ASP A 325 | 24.831 | 19.687 | 60.961 | 1.00 | 38.56 | C |
| ATOM | 2501 | C | ASP A 325 | 25.477 | 20.633 | 61.967 | 1.00 | 37.38 | C |
| ATOM | 2502 | O | ASP A 325 | 26.253 | 21.507 | 61.578 | 1.00 | 35.90 | O |
| ATOM | 2503 | CB | ASP A 325 | 25.584 | 18.345 | 60.939 | 1.00 | 38.53 | C |
| ATOM | 2504 | CG | ASP A 325 | 27.034 | 18.481 | 60.515 | 1.00 | 39.28 | C |
| ATOM | 2505 | OD1 | ASP A 325 | 27.519 | 19.604 | 60.313 | 1.00 | 39.31 | O |
| ATOM | 2506 | OD2 | ASP A 325 | 27.709 | 17.437 | 60.372 | 1.00 | 43.71 | O |
| ATOM | 2507 | N | ASP A 326 | 25.167 | 20.456 | 63.250 | 1.00 | 36.01 | N |
| ATOM | 2508 | CA | ASP A 326 | 25.713 | 21.337 | 64.274 | 1.00 | 35.43 | C |
| ATOM | 2509 | C | ASP A 326 | 27.222 | 21.495 | 64.243 | 1.00 | 35.60 | C |
| ATOM | 2510 | O | ASP A 326 | 27.746 | 22.546 | 64.586 | 1.00 | 34.51 | O |
| ATOM | 2511 | CB | ASP A 326 | 25.242 | 20.880 | 65.646 | 1.00 | 36.38 | C |
| ATOM | 2512 | CG | ASP A 326 | 23.729 | 20.866 | 65.750 | 1.00 | 36.37 | C |
| ATOM | 2513 | OD1 | ASP A 326 | 23.063 | 21.560 | 64.951 | 1.00 | 37.20 | O |
| ATOM | 2514 | OD2 | ASP A 326 | 23.192 | 20.177 | 66.631 | 1.00 | 36.30 | O |
| ATOM | 2515 | N | ALA A 327 | 27.938 | 20.460 | 63.817 | 1.00 | 35.46 | N |
| ATOM | 2516 | CA | ALA A 327 | 29.391 | 20.562 | 63.755 | 1.00 | 34.47 | C |
| ATOM | 2517 | C | ALA A 327 | 29.835 | 21.646 | 62.761 | 1.00 | 33.71 | C |
| ATOM | 2518 | O | ALA A 327 | 30.706 | 22.479 | 63.058 | 1.00 | 32.41 | O |
| ATOM | 2519 | CB | ALA A 327 | 29.998 | 19.186 | 63.377 | 1.00 | 35.19 | C |
| ATOM | 2520 | N | THR A 328 | 29.219 | 21.639 | 61.578 | 1.00 | 33.41 | N |
| ATOM | 2521 | CA | THR A 328 | 29.554 | 22.606 | 60.525 | 1.00 | 32.73 | C |
| ATOM | 2522 | C | THR A 328 | 29.077 | 24.007 | 60.895 | 1.00 | 31.53 | C |
| ATOM | 2523 | O | THR A 328 | 29.781 | 24.986 | 60.671 | 1.00 | 30.89 | O |
| ATOM | 2524 | CB | THR A 328 | 28.912 | 22.188 | 59.178 | 1.00 | 32.15 | C |
| ATOM | 2525 | OG1 | THR A 328 | 29.192 | 20.807 | 58.945 | 1.00 | 33.83 | O |
| ATOM | 2526 | CG2 | THR A 328 | 29.487 | 22.998 | 58.012 | 1.00 | 34.73 | C |
| ATOM | 2527 | N | ILE A 329 | 27.869 | 24.085 | 61.438 | 1.00 | 31.17 | N |
| ATOM | 2528 | CA | ILE A 329 | 27.310 | 25.362 | 61.868 | 1.00 | 31.09 | C |
| ATOM | 2529 | C | ILE A 329 | 28.264 | 26.013 | 62.850 | 1.00 | 31.01 | C |
| ATOM | 2530 | O | ILE A 329 | 28.565 | 27.196 | 62.748 | 1.00 | 31.92 | O |
| ATOM | 2531 | CB | ILE A 329 | 25.971 | 25.160 | 62.582 | 1.00 | 29.89 | C |
| ATOM | 2532 | CG1 | ILE A 329 | 24.898 | 24.800 | 61.558 | 1.00 | 26.80 | C |
| ATOM | 2533 | CG2 | ILE A 329 | 25.644 | 26.399 | 63.416 | 1.00 | 26.74 | C |
| ATOM | 2534 | CD1 | ILE A 329 | 23.572 | 24.355 | 62.139 | 1.00 | 29.88 | C |
| ATOM | 2535 | N | ALA A 330 | 28.757 | 25.223 | 63.804 | 1.00 | 31.00 | N |
| ATOM | 2536 | CA | ALA A 330 | 29.663 | 25.749 | 64.810 | 1.00 | 30.21 | C |
| ATOM | 2537 | C | ALA A 330 | 31.001 | 26.228 | 64.259 | 1.00 | 30.88 | C |
| ATOM | 2538 | O | ALA A 330 | 31.574 | 27.170 | 64.778 | 1.00 | 29.63 | O |
| ATOM | 2539 | CB | ALA A 330 | 29.878 | 24.693 | 65.917 | 1.00 | 32.25 | C |
| ATOM | 2540 | N | LYS A 331 | 31.516 | 25.596 | 63.208 | 1.00 | 31.67 | N |
| ATOM | 2541 | CA | LYS A 331 | 32.814 | 26.025 | 62.660 | 1.00 | 32.94 | C |
| ATOM | 2542 | C | LYS A 331 | 32.687 | 26.984 | 61.463 | 1.00 | 31.93 | C |
| ATOM | 2543 | O | LYS A 331 | 33.672 | 27.556 | 60.966 | 1.00 | 32.18 | O |
| ATOM | 2544 | CB | LYS A 331 | 33.622 | 24.781 | 62.233 | 1.00 | 34.96 | C |
| ATOM | 2545 | CG | LYS A 331 | 33.007 | 24.019 | 61.057 | 1.00 | 36.86 | C |
| ATOM | 2546 | CD | LYS A 331 | 33.914 | 22.868 | 60.587 | 1.00 | 39.00 | C |
| ATOM | 2547 | CE | LYS A 331 | 33.280 | 22.099 | 59.439 | 1.00 | 39.99 | C |
| ATOM | 2548 | NZ | LYS A 331 | 34.108 | 20.910 | 59.067 | 1.00 | 41.76 | N |
| ATOM | 2549 | N | PHE A 332 | 31.458 | 27.182 | 61.023 | 1.00 | 31.15 | N |
| ATOM | 2550 | CA | PHE A 332 | 31.187 | 28.009 | 59.855 | 1.00 | 30.33 | C |
| ATOM | 2551 | C | PHE A 332 | 32.016 | 29.300 | 59.686 | 1.00 | 29.89 | C |
| ATOM | 2552 | O | PHE A 332 | 32.779 | 29.425 | 58.720 | 1.00 | 29.37 | O |
| ATOM | 2553 | CB | PHE A 332 | 29.684 | 28.322 | 59.819 | 1.00 | 31.92 | C |

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ATOM   2554  CG   PHE A 332      29.159  28.615  58.436  1.00 34.23           C
ATOM   2555  CD1  PHE A 332      28.861  27.578  57.557  1.00 33.61           C
ATOM   2556  CD2  PHE A 332      28.996  29.934  58.005  1.00 34.01           C
ATOM   2557  CE1  PHE A 332      28.409  27.849  56.263  1.00 34.54           C
ATOM   2558  CE2  PHE A 332      28.545  30.218  56.712  1.00 33.94           C
ATOM   2559  CZ   PHE A 332      28.253  29.174  55.842  1.00 34.70           C
ATOM   2560  N    GLN A 333      31.893  30.252  60.619  1.00 28.63           N
ATOM   2561  CA   GLN A 333      32.614  31.510  60.483  1.00 27.93           C
ATOM   2562  C    GLN A 333      34.115  31.393  60.557  1.00 28.92           C
ATOM   2563  O    GLN A 333      34.841  32.105  59.836  1.00 28.93           O
ATOM   2564  CB   GLN A 333      32.136  32.540  61.523  1.00 29.81           C
ATOM   2565  CG   GLN A 333      30.643  32.890  61.404  1.00 28.47           C
ATOM   2566  CD   GLN A 333      30.282  34.251  61.999  1.00 29.16           C
ATOM   2567  OE1  GLN A 333      31.094  34.896  62.668  1.00 29.49           O
ATOM   2568  NE2  GLN A 333      29.054  34.697  61.743  1.00 29.27           N
ATOM   2569  N    LYS A 334      34.596  30.526  61.449  1.00 29.81           N
ATOM   2570  CA   LYS A 334      36.047  30.332  61.588  1.00 30.54           C
ATOM   2571  C    LYS A 334      36.604  29.828  60.258  1.00 29.24           C
ATOM   2572  O    LYS A 334      37.614  30.323  59.763  1.00 27.65           O
ATOM   2573  CB   LYS A 334      36.324  29.321  62.702  1.00 32.23           C
ATOM   2574  CG   LYS A 334      37.761  29.307  63.178  1.00 36.08           C
ATOM   2575  CD   LYS A 334      37.840  28.605  64.536  1.00 38.73           C
ATOM   2576  CE   LYS A 334      39.270  28.480  65.044  1.00 41.04           C
ATOM   2577  NZ   LYS A 334      39.977  29.798  65.092  1.00 42.98           N
ATOM   2578  N    GLU A 335      35.918  28.843  59.686  1.00 29.86           N
ATOM   2579  CA   GLU A 335      36.321  28.258  58.406  1.00 32.82           C
ATOM   2580  C    GLU A 335      36.318  29.326  57.321  1.00 32.58           C
ATOM   2581  O    GLU A 335      37.318  29.509  56.605  1.00 33.18           O
ATOM   2582  CB   GLU A 335      35.367  27.114  58.008  1.00 35.51           C
ATOM   2583  CG   GLU A 335      35.450  25.848  58.871  1.00 38.15           C
ATOM   2584  CD   GLU A 335      36.797  25.128  58.728  1.00 41.83           C
ATOM   2585  OE1  GLU A 335      37.210  24.850  57.582  1.00 42.86           O
ATOM   2586  OE2  GLU A 335      37.442  24.830  59.760  1.00 43.64           O
ATOM   2587  N    LEU A 336      35.197  30.039  57.191  1.00 31.90           N
ATOM   2588  CA   LEU A 336      35.118  31.084  56.194  1.00 30.73           C
ATOM   2589  C    LEU A 336      36.235  32.064  56.387  1.00 29.80           C
ATOM   2590  O    LEU A 336      36.818  32.530  55.427  1.00 28.66           O
ATOM   2591  CB   LEU A 336      33.788  31.843  56.277  1.00 30.61           C
ATOM   2592  CG   LEU A 336      32.521  31.253  55.659  1.00 31.81           C
ATOM   2593  CD1  LEU A 336      31.359  32.199  55.998  1.00 29.30           C
ATOM   2594  CD2  LEU A 336      32.664  31.094  54.133  1.00 29.53           C
ATOM   2595  N    ALA A 337      36.541  32.375  57.642  1.00 31.17           N
ATOM   2596  CA   ALA A 337      37.588  33.354  57.942  1.00 32.70           C
ATOM   2597  C    ALA A 337      38.938  32.956  57.373  1.00 33.42           C
ATOM   2598  O    ALA A 337      39.702  33.807  56.881  1.00 32.98           O
ATOM   2599  CB   ALA A 337      37.691  33.575  59.453  1.00 34.49           C
ATOM   2600  N    ALA A 338      39.228  31.665  57.426  1.00 35.58           N
ATOM   2601  CA   ALA A 338      40.503  31.160  56.898  1.00 36.23           C
ATOM   2602  C    ALA A 338      40.553  31.305  55.376  1.00 36.79           C
ATOM   2603  O    ALA A 338      41.648  31.390  54.795  1.00 37.63           O
ATOM   2604  CB   ALA A 338      40.692  29.710  57.296  1.00 37.48           C
ATOM   2605  N    MET A 339      39.375  31.342  54.739  1.00 35.78           N
ATOM   2606  CA   MET A 339      39.275  31.498  53.286  1.00 35.37           C
ATOM   2607  C    MET A 339      39.471  32.954  52.858  1.00 35.16           C
ATOM   2608  O    MET A 339      39.725  33.242  51.690  1.00 35.07           O
ATOM   2609  CB   MET A 339      37.913  31.002  52.785  1.00 36.37           C
ATOM   2610  CG   MET A 339      37.676  29.512  52.994  1.00 36.83           C
ATOM   2611  SD   MET A 339      36.036  29.012  52.474  1.00 40.63           S
ATOM   2612  CE   MET A 339      35.674  27.616  53.467  1.00 35.41           C
ATOM   2613  N    GLY A 340      39.362  33.885  53.805  1.00 34.57           N
ATOM   2614  CA   GLY A 340      39.538  35.285  53.449  1.00 32.01           C
ATOM   2615  C    GLY A 340      38.287  36.143  53.616  1.00 30.77           C
ATOM   2616  O    GLY A 340      38.269  37.296  53.182  1.00 31.77           O
ATOM   2617  N    PHE A 341      37.242  35.577  54.207  1.00 29.22           N
ATOM   2618  CA   PHE A 341      36.002  36.315  54.455  1.00 30.29           C
ATOM   2619  C    PHE A 341      36.179  37.036  55.801  1.00 29.11           C
ATOM   2620  O    PHE A 341      35.808  36.504  56.850  1.00 29.18           O
ATOM   2621  CB   PHE A 341      34.815  35.344  54.501  1.00 30.13           C
ATOM   2622  CG   PHE A 341      34.483  34.730  53.162  1.00 31.25           C
ATOM   2623  CD1  PHE A 341      33.841  35.479  52.172  1.00 32.83           C
ATOM   2624  CD2  PHE A 341      34.879  33.426  52.861  1.00 30.98           C
ATOM   2625  CE1  PHE A 341      33.609  34.931  50.893  1.00 32.00           C
ATOM   2626  CE2  PHE A 341      34.657  32.879  51.614  1.00 31.18           C
ATOM   2627  CZ   PHE A 341      34.025  33.626  50.620  1.00 33.04           C
ATOM   2628  N    LYS A 342      36.789  38.226  55.736  1.00 28.33           N
ATOM   2629  CA   LYS A 342      37.077  39.064  56.911  1.00 28.48           C
ATOM   2630  C    LYS A 342      35.890  39.821  57.540  1.00 28.07           C
ATOM   2631  O    LYS A 342      35.984  40.283  58.674  1.00 26.18           O
ATOM   2632  CB   LYS A 342      38.185  40.058  56.572  1.00 28.03           C
ATOM   2633  CG   LYS A 342      39.493  39.371  56.227  1.00 30.40           C
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| ATOM | 2634 | CD  | LYS A 342 | 39.766 | 38.227 | 57.214 | 1.00 31.27 | C |
| ATOM | 2635 | CE  | LYS A 342 | 41.139 | 37.594 | 56.996 | 1.00 32.74 | C |
| ATOM | 2636 | NZ  | LYS A 342 | 41.270 | 36.368 | 57.833 | 1.00 34.27 | N |
| ATOM | 2637 | N   | PHE A 343 | 34.801 | 39.994 | 56.795 | 1.00 26.54 | N |
| ATOM | 2638 | CA  | PHE A 343 | 33.622 | 40.630 | 57.388 | 1.00 25.02 | C |
| ATOM | 2639 | C   | PHE A 343 | 32.456 | 39.685 | 57.219 | 1.00 23.38 | C |
| ATOM | 2640 | O   | PHE A 343 | 32.105 | 39.340 | 56.100 | 1.00 24.38 | O |
| ATOM | 2641 | CB  | PHE A 343 | 33.275 | 41.949 | 56.726 | 1.00 24.51 | C |
| ATOM | 2642 | CG  | PHE A 343 | 32.132 | 42.656 | 57.406 | 1.00 21.94 | C |
| ATOM | 2643 | CD1 | PHE A 343 | 32.269 | 43.141 | 58.718 | 1.00 22.49 | C |
| ATOM | 2644 | CD2 | PHE A 343 | 30.914 | 42.815 | 56.757 | 1.00 24.01 | C |
| ATOM | 2645 | CE1 | PHE A 343 | 31.193 | 43.782 | 59.374 | 1.00 23.46 | C |
| ATOM | 2646 | CE2 | PHE A 343 | 29.825 | 43.464 | 57.408 | 1.00 23.39 | C |
| ATOM | 2647 | CZ  | PHE A 343 | 29.971 | 43.941 | 58.707 | 1.00 23.38 | C |
| ATOM | 2648 | N   | GLN A 344 | 31.862 | 39.262 | 58.324 | 1.00 23.54 | N |
| ATOM | 2649 | CA  | GLN A 344 | 30.742 | 38.315 | 58.287 | 1.00 23.00 | C |
| ATOM | 2650 | C   | GLN A 344 | 29.591 | 38.835 | 59.137 | 1.00 24.15 | C |
| ATOM | 2651 | O   | GLN A 344 | 29.793 | 39.373 | 60.237 | 1.00 26.22 | O |
| ATOM | 2652 | CB  | GLN A 344 | 31.184 | 36.961 | 58.797 | 1.00 24.60 | C |
| ATOM | 2653 | CG  | GLN A 344 | 32.314 | 36.378 | 57.963 | 1.00 25.21 | C |
| ATOM | 2654 | CD  | GLN A 344 | 32.810 | 35.070 | 58.541 | 1.00 25.96 | C |
| ATOM | 2655 | OE1 | GLN A 344 | 34.013 | 34.825 | 58.569 | 1.00 28.99 | O |
| ATOM | 2656 | NE2 | GLN A 344 | 31.892 | 34.231 | 59.001 | 1.00 24.54 | N |
| ATOM | 2657 | N   | PHE A 345 | 28.373 | 38.607 | 58.674 | 1.00 24.12 | N |
| ATOM | 2658 | CA  | PHE A 345 | 27.238 | 39.196 | 59.365 | 1.00 21.69 | C |
| ATOM | 2659 | C   | PHE A 345 | 25.902 | 38.490 | 59.199 | 1.00 21.58 | C |
| ATOM | 2660 | O   | PHE A 345 | 25.643 | 37.891 | 58.152 | 1.00 21.28 | O |
| ATOM | 2661 | CB  | PHE A 345 | 27.125 | 40.620 | 58.848 | 1.00 21.41 | C |
| ATOM | 2662 | CG  | PHE A 345 | 27.054 | 40.727 | 57.333 | 1.00 23.02 | C |
| ATOM | 2663 | CD1 | PHE A 345 | 28.207 | 40.692 | 56.558 | 1.00 22.29 | C |
| ATOM | 2664 | CD2 | PHE A 345 | 25.821 | 40.891 | 56.685 | 1.00 21.26 | C |
| ATOM | 2665 | CE1 | PHE A 345 | 28.146 | 40.818 | 55.180 | 1.00 23.21 | C |
| ATOM | 2666 | CE2 | PHE A 345 | 25.752 | 41.018 | 55.297 | 1.00 21.72 | C |
| ATOM | 2667 | CZ  | PHE A 345 | 26.920 | 40.980 | 54.546 | 1.00 23.48 | C |
| ATOM | 2668 | N   | ILE A 346 | 25.050 | 38.576 | 60.223 | 1.00 18.41 | N |
| ATOM | 2669 | CA  | ILE A 346 | 23.718 | 37.970 | 60.161 | 1.00 18.70 | C |
| ATOM | 2670 | C   | ILE A 346 | 22.763 | 39.144 | 59.911 | 1.00 19.90 | C |
| ATOM | 2671 | O   | ILE A 346 | 22.346 | 39.820 | 60.843 | 1.00 19.37 | O |
| ATOM | 2672 | CB  | ILE A 346 | 23.331 | 37.275 | 61.483 | 1.00 18.20 | C |
| ATOM | 2673 | CG1 | ILE A 346 | 24.350 | 36.162 | 61.790 | 1.00 16.74 | C |
| ATOM | 2674 | CG2 | ILE A 346 | 21.946 | 36.614 | 61.368 | 1.00 19.05 | C |
| ATOM | 2675 | CD1 | ILE A 346 | 24.061 | 35.420 | 63.088 | 1.00 18.66 | C |
| ATOM | 2676 | N   | THR A 347 | 22.482 | 39.387 | 58.635 | 1.00 20.45 | N |
| ATOM | 2677 | CA  | THR A 347 | 21.622 | 40.488 | 58.213 | 1.00 20.43 | C |
| ATOM | 2678 | C   | THR A 347 | 20.379 | 40.745 | 59.022 | 1.00 19.11 | C |
| ATOM | 2679 | O   | THR A 347 | 20.189 | 41.826 | 59.530 | 1.00 21.53 | O |
| ATOM | 2680 | CB  | THR A 347 | 21.190 | 40.287 | 56.772 | 1.00 20.51 | C |
| ATOM | 2681 | OG1 | THR A 347 | 20.515 | 39.032 | 56.675 | 1.00 19.03 | O |
| ATOM | 2682 | CG2 | THR A 347 | 22.396 | 40.279 | 55.844 | 1.00 22.57 | C |
| ATOM | 2683 | N   | LEU A 348 | 19.522 | 39.754 | 59.146 | 1.00 19.46 | N |
| ATOM | 2684 | CA  | LEU A 348 | 18.241 | 39.945 | 59.825 | 1.00 18.45 | C |
| ATOM | 2685 | C   | LEU A 348 | 18.160 | 39.564 | 61.286 | 1.00 18.44 | C |
| ATOM | 2686 | O   | LEU A 348 | 17.069 | 39.269 | 61.789 | 1.00 16.17 | O |
| ATOM | 2687 | CB  | LEU A 348 | 17.163 | 39.200 | 59.051 | 1.00 19.36 | C |
| ATOM | 2688 | CG  | LEU A 348 | 17.223 | 39.368 | 57.528 | 1.00 23.32 | C |
| ATOM | 2689 | CD1 | LEU A 348 | 15.922 | 38.802 | 56.953 | 1.00 22.90 | C |
| ATOM | 2690 | CD2 | LEU A 348 | 17.390 | 40.825 | 57.123 | 1.00 20.78 | C |
| ATOM | 2691 | N   | ALA A 349 | 19.310 | 39.583 | 61.963 | 1.00 16.91 | N |
| ATOM | 2692 | CA  | ALA A 349 | 19.367 | 39.215 | 63.367 | 1.00 16.42 | C |
| ATOM | 2693 | C   | ALA A 349 | 18.432 | 40.010 | 64.232 | 1.00 17.47 | C |
| ATOM | 2694 | O   | ALA A 349 | 17.757 | 39.428 | 65.069 | 1.00 18.10 | O |
| ATOM | 2695 | CB  | ALA A 349 | 20.804 | 39.313 | 63.901 | 1.00 19.83 | C |
| ATOM | 2696 | N   | GLY A 350 | 18.340 | 41.316 | 63.986 | 1.00 17.28 | N |
| ATOM | 2697 | CA  | GLY A 350 | 17.462 | 42.158 | 64.782 | 1.00 16.30 | C |
| ATOM | 2698 | C   | GLY A 350 | 15.998 | 41.896 | 64.544 | 1.00 16.92 | C |
| ATOM | 2699 | O   | GLY A 350 | 15.227 | 41.904 | 65.486 | 1.00 16.20 | O |
| ATOM | 2700 | N   | PHE A 351 | 15.603 | 41.684 | 63.291 | 1.00 17.84 | N |
| ATOM | 2701 | CA  | PHE A 351 | 14.196 | 41.406 | 63.019 | 1.00 17.27 | C |
| ATOM | 2702 | C   | PHE A 351 | 13.779 | 40.174 | 63.813 | 1.00 18.14 | C |
| ATOM | 2703 | O   | PHE A 351 | 12.761 | 40.155 | 64.489 | 1.00 16.85 | O |
| ATOM | 2704 | CB  | PHE A 351 | 13.976 | 41.117 | 61.513 | 1.00 16.06 | C |
| ATOM | 2705 | CG  | PHE A 351 | 12.585 | 40.589 | 61.183 | 1.00 17.95 | C |
| ATOM | 2706 | CD1 | PHE A 351 | 11.531 | 41.472 | 60.901 | 1.00 17.35 | C |
| ATOM | 2707 | CD2 | PHE A 351 | 12.332 | 39.214 | 61.171 | 1.00 18.89 | C |
| ATOM | 2708 | CE1 | PHE A 351 | 10.225 | 40.987 | 60.598 | 1.00 20.02 | C |
| ATOM | 2709 | CE2 | PHE A 351 | 11.046 | 38.716 | 60.882 | 1.00 18.66 | C |
| ATOM | 2710 | CZ  | PHE A 351 | 9.991  | 39.598 | 60.592 | 1.00 19.58 | C |
| ATOM | 2711 | N   | HIS A 352 | 14.568 | 39.114 | 63.713 | 1.00 17.69 | N |
| ATOM | 2712 | CA  | HIS A 352 | 14.166 | 37.908 | 64.405 | 1.00 18.48 | C |
| ATOM | 2713 | C   | HIS A 352 | 14.177 | 37.982 | 65.942 | 1.00 18.37 | C |

| ATOM | 2714 | O   | HIS A 352 | 13.241 | 37.524 | 66.614 | 1.00 16.72 | O |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 2715 | CB  | HIS A 352 | 14.994 | 36.748 | 63.828 | 1.00 17.93 | C |
| ATOM | 2716 | CG  | HIS A 352 | 14.555 | 36.362 | 62.448 | 1.00 16.36 | C |
| ATOM | 2717 | ND1 | HIS A 352 | 13.363 | 35.710 | 62.204 | 1.00 18.19 | N |
| ATOM | 2718 | CD2 | HIS A 352 | 15.080 | 36.646 | 61.237 | 1.00 17.92 | C |
| ATOM | 2719 | CE1 | HIS A 352 | 13.170 | 35.625 | 60.901 | 1.00 17.20 | C |
| ATOM | 2720 | NE2 | HIS A 352 | 14.196 | 36.184 | 60.296 | 1.00 18.97 | N |
| ATOM | 2721 | N   | ALA A 353 | 15.212 | 38.591 | 66.484 | 1.00 19.02 | N |
| ATOM | 2722 | CA  | ALA A 353 | 15.309 | 38.723 | 67.929 | 1.00 19.63 | C |
| ATOM | 2723 | C   | ALA A 353 | 14.133 | 39.533 | 68.472 | 1.00 20.28 | C |
| ATOM | 2724 | O   | ALA A 353 | 13.490 | 39.148 | 69.459 | 1.00 20.65 | O |
| ATOM | 2725 | CB  | ALA A 353 | 16.602 | 39.379 | 68.271 | 1.00 16.47 | C |
| ATOM | 2726 | N   | LEU A 354 | 13.836 | 40.652 | 67.808 | 1.00 20.91 | N |
| ATOM | 2727 | CA  | LEU A 354 | 12.749 | 41.530 | 68.220 | 1.00 18.36 | C |
| ATOM | 2728 | C   | LEU A 354 | 11.391 | 40.875 | 68.077 | 1.00 18.52 | C |
| ATOM | 2729 | O   | LEU A 354 | 10.606 | 40.924 | 68.986 | 1.00 19.99 | O |
| ATOM | 2730 | CB  | LEU A 354 | 12.778 | 42.847 | 67.390 | 1.00 19.38 | C |
| ATOM | 2731 | CG  | LEU A 354 | 11.707 | 43.921 | 67.728 | 1.00 19.92 | C |
| ATOM | 2732 | CD1 | LEU A 354 | 12.170 | 45.328 | 67.247 | 1.00 16.76 | C |
| ATOM | 2733 | CD2 | LEU A 354 | 10.363 | 43.563 | 67.076 | 1.00 19.32 | C |
| ATOM | 2734 | N   | ASN A 355 | 11.106 | 40.282 | 66.923 | 1.00 17.93 | N |
| ATOM | 2735 | CA  | ASN A 355 | 9.800  | 39.665 | 66.697 | 1.00 18.59 | C |
| ATOM | 2736 | C   | ASN A 355 | 9.601  | 38.419 | 67.581 | 1.00 18.72 | C |
| ATOM | 2737 | O   | ASN A 355 | 8.542  | 38.231 | 68.164 | 1.00 19.70 | O |
| ATOM | 2738 | CB  | ASN A 355 | 9.632  | 39.234 | 65.232 | 1.00 17.88 | C |
| ATOM | 2739 | CG  | ASN A 355 | 9.216  | 40.369 | 64.307 | 1.00 17.76 | C |
| ATOM | 2740 | OD1 | ASN A 355 | 8.030  | 40.609 | 64.076 | 1.00 16.22 | O |
| ATOM | 2741 | ND2 | ASN A 355 | 10.194 | 41.053 | 63.767 | 1.00 16.37 | N |
| ATOM | 2742 | N   | TYR A 356 | 10.598 | 37.547 | 67.639 | 1.00 19.96 | N |
| ATOM | 2743 | CA  | TYR A 356 | 10.431 | 36.352 | 68.462 | 1.00 20.56 | C |
| ATOM | 2744 | C   | TYR A 356 | 10.300 | 36.710 | 69.956 | 1.00 20.95 | C |
| ATOM | 2745 | O   | TYR A 356 | 9.403  | 36.197 | 70.623 | 1.00 20.00 | O |
| ATOM | 2746 | CB  | TYR A 356 | 11.603 | 35.373 | 68.268 | 1.00 21.36 | C |
| ATOM | 2747 | CG  | TYR A 356 | 11.509 | 34.182 | 69.211 | 1.00 24.86 | C |
| ATOM | 2748 | CD1 | TYR A 356 | 10.564 | 33.184 | 69.001 | 1.00 25.26 | C |
| ATOM | 2749 | CD2 | TYR A 356 | 12.273 | 34.135 | 70.382 | 1.00 25.24 | C |
| ATOM | 2750 | CE1 | TYR A 356 | 10.364 | 32.174 | 69.940 | 1.00 26.79 | C |
| ATOM | 2751 | CE2 | TYR A 356 | 12.082 | 33.137 | 71.323 | 1.00 26.97 | C |
| ATOM | 2752 | CZ  | TYR A 356 | 11.126 | 32.164 | 71.098 | 1.00 28.28 | C |
| ATOM | 2753 | OH  | TYR A 356 | 10.929 | 31.181 | 72.042 | 1.00 30.49 | O |
| ATOM | 2754 | N   | SER A 357 | 11.156 | 37.596 | 70.473 | 1.00 21.35 | N |
| ATOM | 2755 | CA  | SER A 357 | 11.085 | 37.949 | 71.899 | 1.00 21.83 | C |
| ATOM | 2756 | C   | SER A 357 | 9.745  | 38.597 | 72.273 | 1.00 22.76 | C |
| ATOM | 2757 | O   | SER A 357 | 9.180  | 38.311 | 73.371 | 1.00 21.10 | O |
| ATOM | 2758 | CB  | SER A 357 | 12.261 | 38.843 | 72.302 | 1.00 22.28 | C |
| ATOM | 2759 | OG  | SER A 357 | 12.141 | 40.128 | 71.734 | 1.00 24.83 | O |
| ATOM | 2760 | N   | MET A 358 | 9.204  | 39.455 | 71.390 | 1.00 21.19 | N |
| ATOM | 2761 | CA  | MET A 358 | 7.926  | 40.054 | 71.710 | 1.00 20.34 | C |
| ATOM | 2762 | C   | MET A 358 | 6.829  | 39.008 | 71.589 | 1.00 21.16 | C |
| ATOM | 2763 | O   | MET A 358 | 5.920  | 39.021 | 72.394 | 1.00 21.12 | O |
| ATOM | 2764 | CB  | MET A 358 | 7.588  | 41.278 | 70.838 | 1.00 20.27 | C |
| ATOM | 2765 | CG  | MET A 358 | 6.285  | 41.986 | 71.272 | 1.00 18.37 | C |
| ATOM | 2766 | SD  | MET A 358 | 6.213  | 42.304 | 73.101 | 1.00 21.01 | S |
| ATOM | 2767 | CE  | MET A 358 | 7.431  | 43.625 | 73.227 | 1.00 20.05 | C |
| ATOM | 2768 | N   | PHE A 359 | 6.917  | 38.112 | 70.599 | 1.00 21.30 | N |
| ATOM | 2769 | CA  | PHE A 359 | 5.895  | 37.061 | 70.484 | 1.00 22.64 | C |
| ATOM | 2770 | C   | PHE A 359 | 5.963  | 36.180 | 71.747 | 1.00 21.66 | C |
| ATOM | 2771 | O   | PHE A 359 | 4.952  | 35.936 | 72.363 | 1.00 22.08 | O |
| ATOM | 2772 | CB  | PHE A 359 | 6.073  | 36.160 | 69.258 | 1.00 21.49 | C |
| ATOM | 2773 | CG  | PHE A 359 | 5.037  | 35.034 | 69.190 | 1.00 21.75 | C |
| ATOM | 2774 | CD1 | PHE A 359 | 3.736  | 35.294 | 68.788 | 1.00 23.31 | C |
| ATOM | 2775 | CD2 | PHE A 359 | 5.335  | 33.766 | 69.678 | 1.00 24.13 | C |
| ATOM | 2776 | CE1 | PHE A 359 | 2.716  | 34.309 | 68.887 | 1.00 25.43 | C |
| ATOM | 2777 | CE2 | PHE A 359 | 4.317  | 32.762 | 69.784 | 1.00 23.18 | C |
| ATOM | 2778 | CZ  | PHE A 359 | 3.020  | 33.043 | 69.397 | 1.00 23.30 | C |
| ATOM | 2779 | N   | ASP A 360 | 7.160  | 35.763 | 72.150 | 1.00 22.98 | N |
| ATOM | 2780 | CA  | ASP A 360 | 7.300  | 34.898 | 73.330 | 1.00 24.34 | C |
| ATOM | 2781 | C   | ASP A 360 | 6.737  | 35.543 | 74.595 | 1.00 25.13 | C |
| ATOM | 2782 | O   | ASP A 360 | 5.957  | 34.928 | 75.324 | 1.00 25.10 | O |
| ATOM | 2783 | CB  | ASP A 360 | 8.762  | 34.531 | 73.539 | 1.00 24.42 | C |
| ATOM | 2784 | CG  | ASP A 360 | 8.941  | 33.450 | 74.598 | 1.00 28.65 | C |
| ATOM | 2785 | OD1 | ASP A 360 | 8.167  | 32.460 | 74.562 | 1.00 26.11 | O |
| ATOM | 2786 | OD2 | ASP A 360 | 9.864  | 33.585 | 75.433 | 1.00 28.60 | O |
| ATOM | 2787 | N   | LEU A 361 | 7.110  | 36.795 | 74.848 | 1.00 23.31 | N |
| ATOM | 2788 | CA  | LEU A 361 | 6.596  | 37.530 | 76.007 | 1.00 23.16 | C |
| ATOM | 2789 | C   | LEU A 361 | 5.081  | 37.728 | 75.972 | 1.00 22.98 | C |
| ATOM | 2790 | O   | LEU A 361 | 4.370  | 37.502 | 76.971 | 1.00 22.61 | O |
| ATOM | 2791 | CB  | LEU A 361 | 7.249  | 38.917 | 76.090 | 1.00 24.04 | C |
| ATOM | 2792 | CG  | LEU A 361 | 6.720  | 39.828 | 77.210 | 1.00 24.50 | C |
| ATOM | 2793 | CD1 | LEU A 361 | 6.864  | 39.127 | 78.604 | 1.00 23.04 | C |

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ATOM   2794  CD2 LEU A 361      7.541  41.128  77.194  1.00 19.72           C
ATOM   2795  N   ALA A 362      4.579  38.161  74.824  1.00 22.35           N
ATOM   2796  CA  ALA A 362      3.155  38.412  74.681  1.00 21.48           C
ATOM   2797  C   ALA A 362      2.317  37.156  74.806  1.00 23.87           C
ATOM   2798  O   ALA A 362      1.224  37.212  75.367  1.00 24.33           O
ATOM   2799  CB  ALA A 362      2.864  39.052  73.366  1.00 19.98           C
ATOM   2800  N   TYR A 363      2.794  36.054  74.231  1.00 23.92           N
ATOM   2801  CA  TYR A 363      2.036  34.816  74.311  1.00 26.21           C
ATOM   2802  C   TYR A 363      1.931  34.399  75.796  1.00 26.63           C
ATOM   2803  O   TYR A 363      0.845  34.048  76.293  1.00 26.40           O
ATOM   2804  CB  TYR A 363      2.726  33.736  73.481  1.00 28.58           C
ATOM   2805  CG  TYR A 363      1.932  32.443  73.407  1.00 32.92           C
ATOM   2806  CD1 TYR A 363      0.895  32.285  72.478  1.00 34.40           C
ATOM   2807  CD2 TYR A 363      2.183  31.397  74.302  1.00 34.06           C
ATOM   2808  CE1 TYR A 363      0.128  31.119  72.445  1.00 36.29           C
ATOM   2809  CE2 TYR A 363      1.421  30.221  74.270  1.00 35.85           C
ATOM   2810  CZ  TYR A 363      0.401  30.100  73.338  1.00 36.97           C
ATOM   2811  OH  TYR A 363     -0.334  28.942  73.274  1.00 40.47           O
ATOM   2812  N   GLY A 364      3.063  34.421  76.491  1.00 25.41           N
ATOM   2813  CA  GLY A 364      3.080  34.089  77.908  1.00 26.65           C
ATOM   2814  C   GLY A 364      2.245  35.078  78.715  1.00 26.79           C
ATOM   2815  O   GLY A 364      1.558  34.668  79.660  1.00 28.57           O
ATOM   2816  N   TYR A 365      2.301  36.374  78.369  1.00 25.41           N
ATOM   2817  CA  TYR A 365      1.519  37.421  79.048  1.00 25.22           C
ATOM   2818  C   TYR A 365      0.022  37.215  78.811  1.00 25.15           C
ATOM   2819  O   TYR A 365     -0.824  37.448  79.679  1.00 25.84           O
ATOM   2820  CB  TYR A 365      1.927  38.806  78.510  1.00 24.05           C
ATOM   2821  CG  TYR A 365      1.201  40.006  79.107  1.00 23.47           C
ATOM   2822  CD1 TYR A 365      1.503  40.462  80.389  1.00 23.98           C
ATOM   2823  CD2 TYR A 365      0.292  40.752  78.350  1.00 23.87           C
ATOM   2824  CE1 TYR A 365      0.937  41.641  80.902  1.00 25.30           C
ATOM   2825  CE2 TYR A 365     -0.282  41.955  78.860  1.00 23.46           C
ATOM   2826  CZ  TYR A 365      0.067  42.378  80.146  1.00 23.37           C
ATOM   2827  OH  TYR A 365     -0.409  43.559  80.656  1.00 24.85           O
ATOM   2828  N   ALA A 366     -0.307  36.799  77.599  1.00 26.22           N
ATOM   2829  CA  ALA A 366     -1.689  36.531  77.228  1.00 27.25           C
ATOM   2830  C   ALA A 366     -2.284  35.402  78.074  1.00 28.94           C
ATOM   2831  O   ALA A 366     -3.489  35.355  78.313  1.00 28.90           O
ATOM   2832  CB  ALA A 366     -1.755  36.151  75.757  1.00 27.93           C
ATOM   2833  N   GLN A 367     -1.438  34.497  78.532  1.00 31.48           N
ATOM   2834  CA  GLN A 367     -1.942  33.358  79.314  1.00 34.99           C
ATOM   2835  C   GLN A 367     -1.887  33.573  80.819  1.00 34.74           C
ATOM   2836  O   GLN A 367     -2.896  33.399  81.529  1.00 35.72           O
ATOM   2837  CB  GLN A 367     -1.144  32.084  78.973  1.00 35.95           C
ATOM   2838  CG  GLN A 367     -1.203  31.672  77.504  1.00 41.18           C
ATOM   2839  CD  GLN A 367     -2.631  31.564  76.992  1.00 43.71           C
ATOM   2840  OE1 GLN A 367     -3.436  30.821  77.552  1.00 47.31           O
ATOM   2841  NE2 GLN A 367     -2.954  32.306  75.929  1.00 44.32           N
ATOM   2842  N   ASN A 368     -0.704  33.969  81.282  1.00 34.32           N
ATOM   2843  CA  ASN A 368     -0.427  34.147  82.699  1.00 33.75           C
ATOM   2844  C   ASN A 368     -0.054  35.541  83.227  1.00 32.14           C
ATOM   2845  O   ASN A 368      0.512  35.646  84.316  1.00 30.93           O
ATOM   2846  CB  ASN A 368      0.686  33.170  83.083  1.00 36.33           C
ATOM   2847  CG  ASN A 368      0.385  31.733  82.646  1.00 38.79           C
ATOM   2848  OD1 ASN A 368      0.643  31.348  81.505  1.00 41.74           O
ATOM   2849  ND2 ASN A 368     -0.176  30.943  83.553  1.00 40.42           N
ATOM   2850  N   GLN A 369     -0.373  36.589  82.472  1.00 30.32           N
ATOM   2851  CA  GLN A 369     -0.058  37.972  82.854  1.00 29.92           C
ATOM   2852  C   GLN A 369      1.316  38.241  83.492  1.00 26.56           C
ATOM   2853  O   GLN A 369      2.339  37.947  82.895  1.00 26.14           O
ATOM   2854  CB  GLN A 369     -1.180  38.534  83.724  1.00 30.77           C
ATOM   2855  CG  GLN A 369     -2.537  38.484  83.037  1.00 33.44           C
ATOM   2856  CD  GLN A 369     -3.194  37.100  83.089  1.00 36.23           C
ATOM   2857  OE1 GLN A 369     -3.156  36.326  82.124  1.00 36.79           O
ATOM   2858  NE2 GLN A 369     -3.804  36.790  84.224  1.00 34.25           N
ATOM   2859  N   MET A 370      1.370  38.791  84.701  1.00 26.64           N
ATOM   2860  CA  MET A 370      2.678  39.111  85.273  1.00 24.13           C
ATOM   2861  C   MET A 370      3.702  38.004  85.409  1.00 26.77           C
ATOM   2862  O   MET A 370      4.922  38.276  85.381  1.00 24.63           O
ATOM   2863  CB  MET A 370      2.513  39.823  86.626  1.00 24.65           C
ATOM   2864  CG  MET A 370      1.775  41.171  86.513  1.00 20.17           C
ATOM   2865  SD  MET A 370      2.464  42.296  85.168  1.00 22.99           S
ATOM   2866  CE  MET A 370      4.242  42.357  85.619  1.00 19.49           C
ATOM   2867  N   SER A 371      3.252  36.754  85.552  1.00 27.20           N
ATOM   2868  CA  SER A 371      4.226  35.683  85.701  1.00 27.95           C
ATOM   2869  C   SER A 371      5.160  35.675  84.506  1.00 27.70           C
ATOM   2870  O   SER A 371      6.377  35.475  84.647  1.00 27.68           O
ATOM   2871  CB  SER A 371      3.528  34.311  85.859  1.00 27.92           C
ATOM   2872  OG  SER A 371      2.847  34.224  87.099  1.00 29.27           O
ATOM   2873  N   ALA A 372      4.604  35.913  83.320  1.00 27.16           N
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| ATOM | 2874 | CA | ALA A 372 | 5.420 | 35.928 | 82.107 | 1.00 | 26.96 | C |
|------|------|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 2875 | C | ALA A 372 | 6.442 | 37.075 | 82.102 | 1.00 | 27.49 | C |
| ATOM | 2876 | O | ALA A 372 | 7.620 | 36.886 | 81.719 | 1.00 | 26.52 | O |
| ATOM | 2877 | CB | ALA A 372 | 4.522 | 36.013 | 80.867 | 1.00 | 24.18 | C |
| ATOM | 2878 | N | TYR A 373 | 6.014 | 38.261 | 82.536 | 1.00 | 26.36 | N |
| ATOM | 2879 | CA | TYR A 373 | 6.972 | 39.367 | 82.555 | 1.00 | 26.53 | C |
| ATOM | 2880 | C | TYR A 373 | 8.056 | 39.151 | 83.614 | 1.00 | 26.45 | C |
| ATOM | 2881 | O | TYR A 373 | 9.235 | 39.461 | 83.396 | 1.00 | 25.92 | O |
| ATOM | 2882 | CB | TYR A 373 | 6.295 | 40.718 | 82.822 | 1.00 | 26.34 | C |
| ATOM | 2883 | CG | TYR A 373 | 7.304 | 41.819 | 82.555 | 1.00 | 25.14 | C |
| ATOM | 2884 | CD1 | TYR A 373 | 7.685 | 42.118 | 81.246 | 1.00 | 25.01 | C |
| ATOM | 2885 | CD2 | TYR A 373 | 8.010 | 42.418 | 83.601 | 1.00 | 25.14 | C |
| ATOM | 2886 | CE1 | TYR A 373 | 8.735 | 42.965 | 80.979 | 1.00 | 24.01 | C |
| ATOM | 2887 | CE2 | TYR A 373 | 9.082 | 43.263 | 83.355 | 1.00 | 24.62 | C |
| ATOM | 2888 | CZ | TYR A 373 | 9.437 | 43.531 | 82.035 | 1.00 | 26.74 | C |
| ATOM | 2889 | OH | TYR A 373 | 10.504 | 44.343 | 81.764 | 1.00 | 25.39 | O |
| ATOM | 2890 | N | VAL A 374 | 7.658 | 38.604 | 84.765 | 1.00 | 26.85 | N |
| ATOM | 2891 | CA | VAL A 374 | 8.603 | 38.378 | 85.833 | 1.00 | 26.33 | C |
| ATOM | 2892 | C | VAL A 374 | 9.648 | 37.369 | 85.407 | 1.00 | 26.60 | C |
| ATOM | 2893 | O | VAL A 374 | 10.822 | 37.469 | 85.793 | 1.00 | 27.21 | O |
| ATOM | 2894 | CB | VAL A 374 | 7.874 | 37.939 | 87.112 | 1.00 | 27.52 | C |
| ATOM | 2895 | CG1 | VAL A 374 | 8.878 | 37.634 | 88.220 | 1.00 | 26.82 | C |
| ATOM | 2896 | CG2 | VAL A 374 | 6.931 | 39.043 | 87.534 | 1.00 | 25.61 | C |
| ATOM | 2897 | N | GLU A 375 | 9.256 | 36.416 | 84.566 | 1.00 | 27.80 | N |
| ATOM | 2898 | CA | GLU A 375 | 10.236 | 35.454 | 84.083 | 1.00 | 29.51 | C |
| ATOM | 2899 | C | GLU A 375 | 11.333 | 36.198 | 83.315 | 1.00 | 29.11 | C |
| ATOM | 2900 | O | GLU A 375 | 12.525 | 35.912 | 83.459 | 1.00 | 28.75 | O |
| ATOM | 2901 | CB | GLU A 375 | 9.578 | 34.428 | 83.174 | 1.00 | 32.52 | C |
| ATOM | 2902 | CG | GLU A 375 | 8.944 | 33.292 | 83.936 | 1.00 | 37.34 | C |
| ATOM | 2903 | CD | GLU A 375 | 8.234 | 32.325 | 83.017 | 1.00 | 41.03 | C |
| ATOM | 2904 | OE1 | GLU A 375 | 8.846 | 31.942 | 81.987 | 1.00 | 41.30 | O |
| ATOM | 2905 | OE2 | GLU A 375 | 7.077 | 31.957 | 83.338 | 1.00 | 40.85 | O |
| ATOM | 2906 | N | LEU A 376 | 10.915 | 37.158 | 82.488 | 1.00 | 28.75 | N |
| ATOM | 2907 | CA | LEU A 376 | 11.861 | 37.959 | 81.715 | 1.00 | 26.38 | C |
| ATOM | 2908 | C | LEU A 376 | 12.745 | 38.786 | 82.655 | 1.00 | 24.93 | C |
| ATOM | 2909 | O | LEU A 376 | 13.971 | 38.770 | 82.533 | 1.00 | 24.20 | O |
| ATOM | 2910 | CB | LEU A 376 | 11.104 | 38.885 | 80.723 | 1.00 | 25.18 | C |
| ATOM | 2911 | CG | LEU A 376 | 11.953 | 39.931 | 79.950 | 1.00 | 24.84 | C |
| ATOM | 2912 | CD1 | LEU A 376 | 13.049 | 39.243 | 79.159 | 1.00 | 23.65 | C |
| ATOM | 2913 | CD2 | LEU A 376 | 11.078 | 40.738 | 79.024 | 1.00 | 22.58 | C |
| ATOM | 2914 | N | GLN A 377 | 12.133 | 39.505 | 83.598 | 1.00 | 26.15 | N |
| ATOM | 2915 | CA | GLN A 377 | 12.936 | 40.307 | 84.520 | 1.00 | 25.44 | C |
| ATOM | 2916 | C | GLN A 377 | 13.991 | 39.470 | 85.260 | 1.00 | 26.51 | C |
| ATOM | 2917 | O | GLN A 377 | 15.140 | 39.906 | 85.403 | 1.00 | 25.57 | O |
| ATOM | 2918 | CB | GLN A 377 | 12.062 | 41.036 | 85.526 | 1.00 | 25.39 | C |
| ATOM | 2919 | CG | GLN A 377 | 12.816 | 42.164 | 86.258 | 1.00 | 25.77 | C |
| ATOM | 2920 | CD | GLN A 377 | 11.938 | 43.015 | 87.165 | 1.00 | 29.29 | C |
| ATOM | 2921 | OE1 | GLN A 377 | 11.862 | 44.245 | 87.003 | 1.00 | 29.74 | O |
| ATOM | 2922 | NE2 | GLN A 377 | 11.270 | 42.378 | 88.124 | 1.00 | 25.89 | N |
| ATOM | 2923 | N | GLU A 378 | 13.628 | 38.260 | 85.717 | 1.00 | 27.58 | N |
| ATOM | 2924 | CA | GLU A 378 | 14.598 | 37.426 | 86.437 | 1.00 | 27.59 | C |
| ATOM | 2925 | C | GLU A 378 | 15.716 | 37.000 | 85.514 | 1.00 | 27.93 | C |
| ATOM | 2926 | O | GLU A 378 | 16.871 | 36.853 | 85.930 | 1.00 | 27.76 | O |
| ATOM | 2927 | CB | GLU A 378 | 13.905 | 36.200 | 87.047 | 1.00 | 30.95 | C |
| ATOM | 2928 | CG | GLU A 378 | 12.899 | 36.555 | 88.135 | 1.00 | 32.26 | C |
| ATOM | 2929 | CD | GLU A 378 | 13.558 | 37.248 | 89.322 | 1.00 | 34.98 | C |
| ATOM | 2930 | OE1 | GLU A 378 | 14.631 | 36.767 | 89.765 | 1.00 | 35.52 | O |
| ATOM | 2931 | OE2 | GLU A 378 | 13.010 | 38.264 | 89.812 | 1.00 | 33.08 | O |
| ATOM | 2932 | N | ARG A 379 | 15.376 | 36.826 | 84.238 | 1.00 | 28.98 | N |
| ATOM | 2933 | CA | ARG A 379 | 16.369 | 36.455 | 83.238 | 1.00 | 28.08 | C |
| ATOM | 2934 | C | ARG A 379 | 17.343 | 37.605 | 83.085 | 1.00 | 26.30 | C |
| ATOM | 2935 | O | ARG A 379 | 18.551 | 37.409 | 82.952 | 1.00 | 25.18 | O |
| ATOM | 2936 | CB | ARG A 379 | 15.690 | 36.176 | 81.905 | 1.00 | 31.11 | C |
| ATOM | 2937 | CG | ARG A 379 | 16.140 | 34.908 | 81.273 | 1.00 | 34.71 | C |
| ATOM | 2938 | CD | ARG A 379 | 14.950 | 34.102 | 80.770 | 1.00 | 37.22 | C |
| ATOM | 2939 | NE | ARG A 379 | 14.317 | 34.751 | 79.633 | 1.00 | 40.19 | N |
| ATOM | 2940 | CZ | ARG A 379 | 13.009 | 34.822 | 79.460 | 1.00 | 39.96 | C |
| ATOM | 2941 | NH1 | ARG A 379 | 12.195 | 34.285 | 80.354 | 1.00 | 41.21 | N |
| ATOM | 2942 | NH2 | ARG A 379 | 12.522 | 35.420 | 78.391 | 1.00 | 41.43 | N |
| ATOM | 2943 | N | GLU A 380 | 16.818 | 38.827 | 83.119 | 1.00 | 26.81 | N |
| ATOM | 2944 | CA | GLU A 380 | 17.685 | 39.981 | 83.007 | 1.00 | 25.54 | C |
| ATOM | 2945 | C | GLU A 380 | 18.605 | 40.070 | 84.224 | 1.00 | 24.12 | C |
| ATOM | 2946 | O | GLU A 380 | 19.797 | 40.297 | 84.075 | 1.00 | 24.11 | O |
| ATOM | 2947 | CB | GLU A 380 | 16.859 | 41.274 | 82.875 | 1.00 | 25.73 | C |
| ATOM | 2948 | CG | GLU A 380 | 16.143 | 41.400 | 81.543 | 1.00 | 24.87 | C |
| ATOM | 2949 | CD | GLU A 380 | 15.306 | 42.661 | 81.484 | 1.00 | 25.24 | C |
| ATOM | 2950 | OE1 | GLU A 380 | 14.208 | 42.672 | 82.076 | 1.00 | 23.59 | O |
| ATOM | 2951 | OE2 | GLU A 380 | 15.768 | 43.649 | 80.869 | 1.00 | 24.49 | O |
| ATOM | 2952 | N | PHE A 381 | 18.060 | 39.906 | 85.423 | 1.00 | 26.16 | N |
| ATOM | 2953 | CA | PHE A 381 | 18.907 | 39.970 | 86.622 | 1.00 | 27.56 | C |

| ATOM | 2954 | C   | PHE A 381 | 19.985 | 38.884 | 86.510 | 1.00 | 27.45 | C  |
| ATOM | 2955 | O   | PHE A 381 | 21.142 | 39.114 | 86.842 | 1.00 | 25.03 | O  |
| ATOM | 2956 | CB  | PHE A 381 | 18.079 | 39.765 | 87.892 | 1.00 | 27.68 | C  |
| ATOM | 2957 | CG  | PHE A 381 | 17.239 | 40.963 | 88.287 | 1.00 | 28.49 | C  |
| ATOM | 2958 | CD1 | PHE A 381 | 17.810 | 42.228 | 88.404 | 1.00 | 29.48 | C  |
| ATOM | 2959 | CD2 | PHE A 381 | 15.899 | 40.801 | 88.615 | 1.00 | 27.89 | C  |
| ATOM | 2960 | CE1 | PHE A 381 | 17.048 | 43.320 | 88.852 | 1.00 | 29.90 | C  |
| ATOM | 2961 | CE2 | PHE A 381 | 15.139 | 41.870 | 89.058 | 1.00 | 28.13 | C  |
| ATOM | 2962 | CZ  | PHE A 381 | 15.707 | 43.137 | 89.180 | 1.00 | 28.24 | C  |
| ATOM | 2963 | N   | ALA A 382 | 19.604 | 37.713 | 85.992 | 1.00 | 28.81 | N  |
| ATOM | 2964 | CA  | ALA A 382 | 20.561 | 36.622 | 85.842 | 1.00 | 30.02 | C  |
| ATOM | 2965 | C   | ALA A 382 | 21.677 | 36.967 | 84.866 | 1.00 | 32.20 | C  |
| ATOM | 2966 | O   | ALA A 382 | 22.842 | 36.625 | 85.085 | 1.00 | 31.62 | O  |
| ATOM | 2967 | CB  | ALA A 382 | 19.841 | 35.368 | 85.384 | 1.00 | 32.52 | C. |
| ATOM | 2968 | N   | ALA A 383 | 21.326 | 37.671 | 83.791 | 1.00 | 32.50 | N  |
| ATOM | 2969 | CA  | ALA A 383 | 22.307 | 38.032 | 82.783 | 1.00 | 32.93 | C  |
| ATOM | 2970 | C   | ALA A 383 | 23.330 | 39.082 | 83.227 | 1.00 | 33.79 | C  |
| ATOM | 2971 | O   | ALA A 383 | 24.331 | 39.312 | 82.534 | 1.00 | 33.23 | O  |
| ATOM | 2972 | CB  | ALA A 383 | 21.587 | 38.490 | 81.515 | 1.00 | 32.26 | C  |
| ATOM | 2973 | N   | GLU A 384 | 23.100 | 39.718 | 84.375 | 1.00 | 35.38 | N  |
| ATOM | 2974 | CA  | GLU A 384 | 24.041 | 40.730 | 84.841 | 1.00 | 37.16 | C  |
| ATOM | 2975 | C   | GLU A 384 | 25.425 | 40.126 | 85.083 | 1.00 | 37.70 | C  |
| ATOM | 2976 | O   | GLU A 384 | 26.440 | 40.814 | 84.993 | 1.00 | 36.99 | O  |
| ATOM | 2977 | CB  | GLU A 384 | 23.523 | 41.394 | 86.117 | 1.00 | 38.26 | C  |
| ATOM | 2978 | CG  | GLU A 384 | 22.105 | 41.909 | 85.990 | 1.00 | 40.83 | C  |
| ATOM | 2979 | CD  | GLU A 384 | 21.699 | 42.778 | 87.165 | 1.00 | 43.17 | C  |
| ATOM | 2980 | OE1 | GLU A 384 | 22.150 | 42.492 | 88.302 | 1.00 | 45.58 | O  |
| ATOM | 2981 | OE2 | GLU A 384 | 20.925 | 43.738 | 86.956 | 1.00 | 44.09 | O  |
| ATOM | 2982 | N   | GLU A 385 | 25.471 | 38.831 | 85.386 | 1.00 | 40.00 | N  |
| ATOM | 2983 | CA  | GLU A 385 | 26.754 | 38.172 | 85.602 | 1.00 | 41.93 | C  |
| ATOM | 2984 | C   | GLU A 385 | 27.515 | 38.198 | 84.290 | 1.00 | 41.84 | C  |
| ATOM | 2985 | O   | GLU A 385 | 28.753 | 38.232 | 84.277 | 1.00 | 40.43 | O  |
| ATOM | 2986 | CB  | GLU A 385 | 26.555 | 36.724 | 86.014 | 1.00 | 44.98 | C  |
| ATOM | 2987 | CG  | GLU A 385 | 25.894 | 36.544 | 87.350 | 1.00 | 49.05 | C  |
| ATOM | 2988 | CD  | GLU A 385 | 25.472 | 35.107 | 87.576 | 1.00 | 52.23 | C  |
| ATOM | 2989 | OE1 | GLU A 385 | 24.440 | 34.690 | 86.994 | 1.00 | 53.71 | O  |
| ATOM | 2990 | OE2 | GLU A 385 | 26.185 | 34.391 | 88.322 | 1.00 | 53.83 | O  |
| ATOM | 2991 | N   | ARG A 386 | 26.762 | 38.181 | 83.186 | 1.00 | 40.41 | N  |
| ATOM | 2992 | CA  | ARG A 386 | 27.353 | 38.187 | 81.846 | 1.00 | 39.65 | C  |
| ATOM | 2993 | C   | ARG A 386 | 27.701 | 39.585 | 81.367 | 1.00 | 38.54 | C  |
| ATOM | 2994 | O   | ARG A 386 | 28.283 | 39.748 | 80.288 | 1.00 | 37.65 | O  |
| ATOM | 2995 | CB  | ARG A 386 | 26.409 | 37.511 | 80.837 | 1.00 | 40.18 | C  |
| ATOM | 2996 | CG  | ARG A 386 | 26.362 | 35.983 | 80.952 | 1.00 | 41.78 | C  |
| ATOM | 2997 | CD  | ARG A 386 | 25.548 | 35.342 | 79.833 | 1.00 | 42.23 | C  |
| ATOM | 2998 | NE  | ARG A 386 | 24.099 | 35.416 | 80.056 | 1.00 | 44.65 | N  |
| ATOM | 2999 | CZ  | ARG A 386 | 23.201 | 35.470 | 79.071 | 1.00 | 45.67 | C  |
| ATOM | 3000 | NH1 | ARG A 386 | 23.608 | 35.460 | 77.807 | 1.00 | 45.89 | N  |
| ATOM | 3001 | NH2 | ARG A 386 | 21.899 | 35.542 | 79.336 | 1.00 | 45.00 | N  |
| ATOM | 3002 | N   | GLY A 387 | 27.324 | 40.589 | 82.163 | 1.00 | 36.70 | N  |
| ATOM | 3003 | CA  | GLY A 387 | 27.624 | 41.967 | 81.820 | 1.00 | 33.94 | C  |
| ATOM | 3004 | C   | GLY A 387 | 26.433 | 42.813 | 81.405 | 1.00 | 31.22 | C  |
| ATOM | 3005 | O   | GLY A 387 | 26.599 | 43.993 | 81.116 | 1.00 | 31.33 | O  |
| ATOM | 3006 | N   | TYR A 388 | 25.247 | 42.215 | 81.397 | 1.00 | 29.84 | N  |
| ATOM | 3007 | CA  | TYR A 388 | 24.020 | 42.901 | 81.021 | 1.00 | 28.60 | C  |
| ATOM | 3008 | C   | TYR A 388 | 23.737 | 43.993 | 82.042 | 1.00 | 28.17 | C  |
| ATOM | 3009 | O   | TYR A 388 | 23.882 | 43.780 | 83.263 | 1.00 | 26.51 | O  |
| ATOM | 3010 | CB  | TYR A 388 | 22.851 | 41.926 | 81.003 | 1.00 | 28.11 | C  |
| ATOM | 3011 | CG  | TYR A 388 | 21.540 | 42.512 | 80.505 | 1.00 | 27.96 | C  |
| ATOM | 3012 | CD1 | TYR A 388 | 21.409 | 42.982 | 79.191 | 1.00 | 27.67 | C  |
| ATOM | 3013 | CD2 | TYR A 388 | 20.407 | 42.521 | 81.327 | 1.00 | 27.30 | C  |
| ATOM | 3014 | CE1 | TYR A 388 | 20.176 | 43.430 | 78.712 | 1.00 | 25.94 | C  |
| ATOM | 3015 | CE2 | TYR A 388 | 19.169 | 42.973 | 80.870 | 1.00 | 25.73 | C  |
| ATOM | 3016 | CZ  | TYR A 388 | 19.060 | 43.417 | 79.559 | 1.00 | 26.05 | C  |
| ATOM | 3017 | OH  | TYR A 388 | 17.824 | 43.800 | 79.106 | 1.00 | 21.46 | O  |
| ATOM | 3018 | N   | THR A 389 | 23.322 | 45.155 | 81.549 | 1.00 | 25.41 | N  |
| ATOM | 3019 | CA  | THR A 389 | 23.048 | 46.292 | 82.431 | 1.00 | 24.74 | C  |
| ATOM | 3020 | C   | THR A 389 | 21.657 | 46.923 | 82.298 | 1.00 | 24.21 | C  |
| ATOM | 3021 | O   | THR A 389 | 21.297 | 47.730 | 83.139 | 1.00 | 23.67 | O  |
| ATOM | 3022 | CB  | THR A 389 | 24.101 | 47.426 | 82.216 | 1.00 | 25.59 | C  |
| ATOM | 3023 | OG1 | THR A 389 | 24.032 | 47.916 | 80.856 | 1.00 | 27.04 | O  |
| ATOM | 3024 | CG2 | THR A 389 | 25.508 | 46.899 | 82.476 | 1.00 | 24.02 | C  |
| ATOM | 3025 | N   | ALA A 390 | 20.875 | 46.532 | 81.290 | 1.00 | 23.19 | N  |
| ATOM | 3026 | CA  | ALA A 390 | 19.555 | 47.139 | 81.033 | 1.00 | 22.43 | C  |
| ATOM | 3027 | C   | ALA A 390 | 18.408 | 46.928 | 81.999 | 1.00 | 21.85 | C  |
| ATOM | 3028 | O   | ALA A 390 | 17.361 | 47.582 | 81.882 | 1.00 | 21.59 | O  |
| ATOM | 3029 | CB  | ALA A 390 | 19.078 | 46.808 | 79.595 | 1.00 | 21.12 | C  |
| ATOM | 3030 | N   | THR A 391 | 18.560 | 46.011 | 82.947 | 1.00 | 20.59 | N  |
| ATOM | 3031 | CA  | THR A 391 | 17.501 | 45.806 | 83.942 | 1.00 | 21.96 | C  |
| ATOM | 3032 | C   | THR A 391 | 17.236 | 47.173 | 84.626 | 1.00 | 21.61 | C  |
| ATOM | 3033 | O   | THR A 391 | 16.095 | 47.530 | 84.912 | 1.00 | 21.93 | O  |

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ATOM   3034  CB   THR A 391      17.960  44.779  84.967  1.00 22.01           C
ATOM   3035  OG1  THR A 391      18.907  43.894  84.324  1.00 20.92           O
ATOM   3036  CG2  THR A 391      16.768  43.979  85.440  1.00 23.59           C
ATOM   3037  N    LYS A 392      18.320  47.894  84.892  1.00 20.96           N
ATOM   3038  CA   LYS A 392      18.260  49.250  85.466  1.00 21.82           C
ATOM   3039  C    LYS A 392      18.112  50.131  84.257  1.00 19.61           C
ATOM   3040  O    LYS A 392      19.061  50.744  83.777  1.00 20.31           O
ATOM   3041  CB   LYS A 392      19.547  49.606  86.207  1.00 22.01           C
ATOM   3042  CG   LYS A 392      19.620  48.918  87.564  1.00 27.72           C
ATOM   3043  CD   LYS A 392      21.057  48.800  88.038  1.00 32.07           C
ATOM   3044  CE   LYS A 392      21.276  49.606  89.277  1.00 33.90           C
ATOM   3045  NZ   LYS A 392      21.315  51.061  89.004  1.00 38.63           N
ATOM   3046  N    HIS A 393      16.892  50.194  83.774  1.00 18.17           N
ATOM   3047  CA   HIS A 393      16.639  50.948  82.553  1.00 20.04           C
ATOM   3048  C    HIS A 393      16.782  52.489  82.645  1.00 19.20           C
ATOM   3049  O    HIS A 393      17.044  53.141  81.624  1.00 19.66           O
ATOM   3050  CB   HIS A 393      15.266  50.563  82.032  1.00 17.52           C
ATOM   3051  CG   HIS A 393      14.181  50.692  83.050  1.00 20.97           C
ATOM   3052  ND1  HIS A 393      13.368  49.636  83.409  1.00 22.37           N
ATOM   3053  CD2  HIS A 393      13.745  51.759  83.761  1.00 21.90           C
ATOM   3054  CE1  HIS A 393      12.479  50.046  84.295  1.00 21.29           C
ATOM   3055  NE2  HIS A 393      12.686  51.330  84.528  1.00 21.15           N
ATOM   3056  N    GLN A 394      16.658  53.069  83.840  1.00 17.03           N
ATOM   3057  CA   GLN A 394      16.774  54.537  83.932  1.00 17.78           C
ATOM   3058  C    GLN A 394      18.191  54.984  83.620  1.00 18.50           C
ATOM   3059  O    GLN A 394      18.405  55.800  82.730  1.00 17.42           O
ATOM   3060  CB   GLN A 394      16.338  55.051  85.313  1.00 16.97           C
ATOM   3061  CG   GLN A 394      15.009  54.504  85.774  1.00 20.10           C
ATOM   3062  CD   GLN A 394      13.791  55.077  85.048  1.00 18.99           C
ATOM   3063  OE1  GLN A 394      13.885  55.621  83.941  1.00 17.79           O
ATOM   3064  NE2  GLN A 394      12.629  54.924  85.668  1.00 19.68           N
ATOM   3065  N    ARG A 395      19.181  54.427  84.326  1.00 18.27           N
ATOM   3066  CA   ARG A 395      20.546  54.785  84.015  1.00 18.42           C
ATOM   3067  C    ARG A 395      20.899  54.351  82.588  1.00 16.21           C
ATOM   3068  O    ARG A 395      21.655  55.028  81.944  1.00 17.55           O
ATOM   3069  CB   ARG A 395      21.538  54.133  84.993  1.00 19.46           C
ATOM   3070  CG   ARG A 395      21.285  52.642  85.194  1.00 21.93           C
ATOM   3071  CD   ARG A 395      22.588  51.908  85.484  1.00 22.02           C
ATOM   3072  NE   ARG A 395      23.546  52.050  84.385  1.00 23.84           N
ATOM   3073  CZ   ARG A 395      23.379  51.498  83.185  1.00 23.09           C
ATOM   3074  NH1  ARG A 395      22.288  50.779  82.938  1.00 21.28           N
ATOM   3075  NH2  ARG A 395      24.305  51.644  82.251  1.00 21.76           N
ATOM   3076  N    GLU A 396      20.319  53.250  82.102  1.00 16.56           N
ATOM   3077  CA   GLU A 396      20.616  52.715  80.750  1.00 17.11           C
ATOM   3078  C    GLU A 396      20.312  53.746  79.640  1.00 16.88           C
ATOM   3079  O    GLU A 396      21.048  53.855  78.641  1.00 17.91           O
ATOM   3080  CB   GLU A 396      19.802  51.434  80.502  1.00 15.77           C
ATOM   3081  CG   GLU A 396      20.127  50.667  79.173  1.00 18.83           C
ATOM   3082  CD   GLU A 396      21.466  49.905  79.198  1.00 23.28           C
ATOM   3083  OE1  GLU A 396      22.019  49.672  80.307  1.00 22.03           O
ATOM   3084  OE2  GLU A 396      21.959  49.517  78.104  1.00 24.02           O
ATOM   3085  N    VAL A 397      19.239  54.508  79.824  1.00 13.85           N
ATOM   3086  CA   VAL A 397      18.860  55.489  78.832  1.00 16.25           C
ATOM   3087  C    VAL A 397      19.420  56.894  79.144  1.00 16.64           C
ATOM   3088  O    VAL A 397      19.143  57.865  78.438  1.00 15.83           O
ATOM   3089  CB   VAL A 397      17.302  55.467  78.668  1.00 17.31           C
ATOM   3090  CG1  VAL A 397      16.591  55.852  79.939  1.00 14.02           C
ATOM   3091  CG2  VAL A 397      16.909  56.328  77.554  1.00 24.63           C
ATOM   3092  N    GLY A 398      20.238  56.998  80.195  1.00 16.05           N
ATOM   3093  CA   GLY A 398      20.813  58.292  80.494  1.00 14.40           C
ATOM   3094  C    GLY A 398      20.252  59.132  81.617  1.00 15.76           C
ATOM   3095  O    GLY A 398      20.598  60.316  81.688  1.00 15.69           O
ATOM   3096  N    ALA A 399      19.423  58.574  82.497  1.00 15.24           N
ATOM   3097  CA   ALA A 399      18.887  59.385  83.614  1.00 16.45           C
ATOM   3098  C    ALA A 399      20.028  59.990  84.455  1.00 18.10           C
ATOM   3099  O    ALA A 399      19.955  61.145  84.865  1.00 16.80           O
ATOM   3100  CB   ALA A 399      18.013  58.540  84.499  1.00 17.28           C
ATOM   3101  N    GLY A 400      21.064  59.201  84.724  1.00 17.74           N
ATOM   3102  CA   GLY A 400      22.191  59.729  85.493  1.00 18.49           C
ATOM   3103  C    GLY A 400      22.974  60.751  84.703  1.00 17.74           C
ATOM   3104  O    GLY A 400      23.532  61.732  85.243  1.00 16.99           O
ATOM   3105  N    TYR A 401      23.072  60.529  83.400  1.00 17.24           N
ATOM   3106  CA   TYR A 401      23.788  61.479  82.596  1.00 15.16           C
ATOM   3107  C    TYR A 401      23.053  62.834  82.558  1.00 16.71           C
ATOM   3108  O    TYR A 401      23.690  63.900  82.707  1.00 14.01           O
ATOM   3109  CB   TYR A 401      23.956  60.947  81.176  1.00 17.70           C
ATOM   3110  CG   TYR A 401      24.730  61.877  80.291  1.00 15.52           C
ATOM   3111  CD1  TYR A 401      26.118  62.021  80.425  1.00 14.95           C
ATOM   3112  CD2  TYR A 401      24.084  62.629  79.313  1.00 14.26           C
ATOM   3113  CE1  TYR A 401      26.821  62.870  79.599  1.00 13.77           C
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ATOM   3114  CE2 TYR A 401      24.792  63.507  78.473  1.00 16.83           C
ATOM   3115  CZ  TYR A 401      26.171  63.615  78.621  1.00 17.28           C
ATOM   3116  OH  TYR A 401      26.860  64.466  77.770  1.00 18.51           O
ATOM   3117  N   PHE A 402      21.732  62.840  82.334  1.00 14.85           N
ATOM   3118  CA  PHE A 402      21.075  64.133  82.313  1.00 14.77           C
ATOM   3119  C   PHE A 402      21.027  64.735  83.708  1.00 15.88           C
ATOM   3120  O   PHE A 402      20.844  65.960  83.863  1.00 14.84           O
ATOM   3121  CB  PHE A 402      19.694  64.073  81.662  1.00 15.27           C
ATOM   3122  CG  PHE A 402      19.765  64.057  80.163  1.00 14.57           C
ATOM   3123  CD1 PHE A 402      20.084  62.887  79.467  1.00 13.95           C
ATOM   3124  CD2 PHE A 402      19.661  65.236  79.452  1.00 16.12           C
ATOM   3125  CE1 PHE A 402      20.311  62.922  78.061  1.00 13.25           C
ATOM   3126  CE2 PHE A 402      19.874  65.276  78.064  1.00 15.46           C
ATOM   3127  CZ  PHE A 402      20.209  64.090  77.373  1.00 14.93           C
ATOM   3128  N   ASP A 403      21.195  63.882  84.722  1.00 15.59           N
ATOM   3129  CA  ASP A 403      21.233  64.390  86.088  1.00 16.92           C
ATOM   3130  C   ASP A 403      22.535  65.193  86.251  1.00 17.60           C
ATOM   3131  O   ASP A 403      22.563  66.227  86.902  1.00 15.63           O
ATOM   3132  CB  ASP A 403      21.209  63.249  87.118  1.00 16.32           C
ATOM   3133  CG  ASP A 403      19.790  62.929  87.590  1.00 19.16           C
ATOM   3134  OD1 ASP A 403      18.840  63.581  87.088  1.00 18.82           O
ATOM   3135  OD2 ASP A 403      19.619  62.059  88.474  1.00 19.61           O
ATOM   3136  N   ARG A 404      23.610  64.688  85.672  1.00 17.30           N
ATOM   3137  CA  ARG A 404      24.880  65.374  85.755  1.00 18.49           C
ATOM   3138  C   ARG A 404      24.769  66.691  84.991  1.00 17.29           C
ATOM   3139  O   ARG A 404      25.255  67.735  85.425  1.00 17.41           O
ATOM   3140  CB  ARG A 404      25.990  64.482  85.178  1.00 21.09           C
ATOM   3141  CG  ARG A 404      27.368  65.067  85.366  1.00 25.75           C
ATOM   3142  CD  ARG A 404      27.689  65.035  86.874  1.00 31.87           C
ATOM   3143  NE  ARG A 404      28.537  63.887  87.154  1.00 37.69           N
ATOM   3144  CZ  ARG A 404      29.831  63.866  86.852  1.00 38.98           C
ATOM   3145  NH1 ARG A 404      30.391  64.927  86.292  1.00 40.03           N
ATOM   3146  NH2 ARG A 404      30.552  62.786  87.074  1.00 41.30           N
ATOM   3147  N   ILE A 405      24.113  66.675  83.843  1.00 15.28           N
ATOM   3148  CA  ILE A 405      23.968  67.933  83.130  1.00 15.72           C
ATOM   3149  C   ILE A 405      23.164  68.917  84.013  1.00 15.77           C
ATOM   3150  O   ILE A 405      23.533  70.077  84.191  1.00 14.94           O
ATOM   3151  CB  ILE A 405      23.203  67.754  81.807  1.00 15.44           C
ATOM   3152  CG1 ILE A 405      24.029  66.937  80.834  1.00 13.43           C
ATOM   3153  CG2 ILE A 405      22.844  69.139  81.232  1.00 14.93           C
ATOM   3154  CD1 ILE A 405      23.317  66.717  79.539  1.00 16.24           C
ATOM   3155  N   ALA A 406      22.060  68.436  84.571  1.00 14.26           N
ATOM   3156  CA  ALA A 406      21.219  69.303  85.387  1.00 15.37           C
ATOM   3157  C   ALA A 406      21.982  69.921  86.581  1.00 16.79           C
ATOM   3158  O   ALA A 406      21.823  71.126  86.861  1.00 17.81           O
ATOM   3159  CB  ALA A 406      19.986  68.540  85.891  1.00 16.31           C
ATOM   3160  N   THR A 407      22.832  69.116  87.226  1.00 17.15           N
ATOM   3161  CA  THR A 407      23.607  69.615  88.373  1.00 18.90           C
ATOM   3162  C   THR A 407      24.830  70.418  87.999  1.00 20.27           C
ATOM   3163  O   THR A 407      25.443  71.042  88.872  1.00 21.21           O
ATOM   3164  CB  THR A 407      24.018  68.498  89.381  1.00 19.37           C
ATOM   3165  OG1 THR A 407      24.816  67.488  88.730  1.00 19.05           O
ATOM   3166  CG2 THR A 407      22.772  67.897  90.010  1.00 18.37           C
ATOM   3167  N   THR A 408      25.197  70.411  86.717  1.00 20.00           N
ATOM   3168  CA  THR A 408      26.309  71.245  86.272  1.00 18.55           C
ATOM   3169  C   THR A 408      25.692  72.636  86.031  1.00 20.36           C
ATOM   3170  O   THR A 408      26.288  73.668  86.356  1.00 19.32           O
ATOM   3171  CB  THR A 408      26.951  70.675  84.998  1.00 17.08           C
ATOM   3172  OG1 THR A 408      27.463  69.368  85.294  1.00 18.17           O
ATOM   3173  CG2 THR A 408      28.097  71.577  84.498  1.00 17.41           C
ATOM   3174  N   VAL A 409      24.488  72.680  85.470  1.00 18.24           N
ATOM   3175  CA  VAL A 409      23.808  73.964  85.249  1.00 19.48           C
ATOM   3176  C   VAL A 409      23.432  74.599  86.600  1.00 19.47           C
ATOM   3177  O   VAL A 409      23.647  75.809  86.814  1.00 19.31           O
ATOM   3178  CB  VAL A 409      22.562  73.779  84.384  1.00 20.24           C
ATOM   3179  CG1 VAL A 409      21.676  75.039  84.417  1.00 21.31           C
ATOM   3180  CG2 VAL A 409      22.990  73.484  82.956  1.00 21.74           C
ATOM   3181  N   ASP A 410      22.901  73.793  87.513  1.00 20.37           N
ATOM   3182  CA  ASP A 410      22.519  74.271  88.864  1.00 22.03           C
ATOM   3183  C   ASP A 410      22.690  73.124  89.834  1.00 22.44           C
ATOM   3184  O   ASP A 410      21.775  72.326  90.016  1.00 19.60           O
ATOM   3185  CB  ASP A 410      21.061  74.711  88.912  1.00 22.73           C
ATOM   3186  CG  ASP A 410      20.634  75.188  90.317  1.00 22.88           C
ATOM   3187  OD1 ASP A 410      21.333  74.941  91.318  1.00 27.99           O
ATOM  ,3188  OD2 ASP A 410      19.582  75.805  90.430  1.00 26.69           O
ATOM   3189  N   PRO A 411      23.856  73.039  90.502  1.00 22.49           N
ATOM   3190  CA  PRO A 411      24.046  71.929  91.434  1.00 25.04           C
ATOM   3191  C   PRO A 411      22.959  71.714  92.491  1.00 25.05           C
ATOM   3192  O   PRO A 411      22.824  70.609  93.016  1.00 25.32           O
ATOM   3193  CB  PRO A 411      25.432  72.194  92.049  1.00 25.96           C
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| ATOM | 3194 | CG | PRO A 411 | 25.728 | 73.631 | 91.714 | 1.00 | 27.31 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 3195 | CD | PRO A 411 | 25.056 | 73.895 | 90.409 | 1.00 | 25.46 | C |
| ATOM | 3196 | N | ASN A 412 | 22.177 | 72.740 | 92.791 | 1.00 | 23.95 | N |
| ATOM | 3197 | CA | ASN A 412 | 21.157 | 72.560 | 93.804 | 1.00 | 24.51 | C |
| ATOM | 3198 | C | ASN A 412 | 19.758 | 72.372 | 93.281 | 1.00 | 25.06 | C |
| ATOM | 3199 | O | ASN A 412 | 18.787 | 72.520 | 94.026 | 1.00 | 23.48 | O |
| ATOM | 3200 | CB | ASN A 412 | 21.207 | 73.698 | 94.818 | 1.00 | 25.96 | C |
| ATOM | 3201 | CG | ASN A 412 | 22.528 | 73.727 | 95.561 | 1.00 | 26.83 | C |
| ATOM | 3202 | OD1 | ASN A 412 | 22.951 | 72.713 | 96.126 | 1.00 | 27.03 | O |
| ATOM | 3203 | ND2 | ASN A 412 | 23.202 | 74.866 | 95.532 | 1.00 | 28.11 | N |
| ATOM | 3204 | N | SER A 413 | 19.661 | 72.024 | 92.003 | 1.00 | 23.05 | N |
| ATOM | 3205 | CA | SER A 413 | 18.366 | 71.789 | 91.385 | 1.00 | 23.33 | C |
| ATOM | 3206 | C | SER A 413 | 17.521 | 70.837 | 92.249 | 1.00 | 22.67 | C |
| ATOM | 3207 | O | SER A 413 | 18.025 | 69.825 | 92.731 | 1.00 | 21.46 | O |
| ATOM | 3208 | CB | SER A 413 | 18.556 | 71.164 | 90.005 | 1.00 | 22.07 | C |
| ATOM | 3209 | OG | SER A 413 | 17.319 | 70.706 | 89.523 | 1.00 | 23.14 | O |
| ATOM | 3210 | N | SER A 414 | 16.231 | 71.138 | 92.427 | 1.00 | 22.42 | N |
| ATOM | 3211 | CA | SER A 414 | 15.411 | 70.239 | 93.250 | 1.00 | 21.66 | C |
| ATOM | 3212 | C | SER A 414 | 14.617 | 69.246 | 92.404 | 1.00 | 22.04 | C |
| ATOM | 3213 | O | SER A 414 | 13.769 | 68.528 | 92.915 | 1.00 | 21.23 | O |
| ATOM | 3214 | CB | SER A 414 | 14.470 | 71.055 | 94.134 | 1.00 | 23.93 | C |
| ATOM | 3215 | OG | SER A 414 | 13.646 | 71.873 | 93.354 | 1.00 | 26.70 | O |
| ATOM | 3216 | N | THR A 415 | 14.943 | 69.175 | 91.118 | 1.00 | 21.11 | N |
| ATOM | 3217 | CA | THR A 415 | 14.233 | 68.303 | 90.212 | 1.00 | 21.54 | C |
| ATOM | 3218 | C | THR A 415 | 15.079 | 67.314 | 89.449 | 1.00 | 21.66 | C |
| ATOM | 3219 | O | THR A 415 | 14.768 | 67.004 | 88.282 | 1.00 | 23.30 | O |
| ATOM | 3220 | CB | THR A 415 | 13.408 | 69.111 | 89.179 | 1.00 | 22.80 | C |
| ATOM | 3221 | OG1 | THR A 415 | 14.280 | 69.933 | 88.403 | 1.00 | 22.13 | O |
| ATOM | 3222 | CG2 | THR A 415 | 12.356 | 70.000 | 89.874 | 1.00 | 23.24 | C |
| ATOM | 3223 | N | THR A 416 | 16.149 | 66.816 | 90.064 | 1.00 | 21.59 | N |
| ATOM | 3224 | CA | THR A 416 | 16.950 | 65.810 | 89.391 | 1.00 | 21.03 | C |
| ATOM | 3225 | C | THR A 416 | 16.166 | 64.502 | 89.484 | 1.00 | 22.33 | C |
| ATOM | 3226 | O | THR A 416 | 15.270 | 64.378 | 90.303 | 1.00 | 22.21 | O |
| ATOM | 3227 | CB | THR A 416 | 18.358 | 65.677 | 89.998 | 1.00 | 21.69 | C |
| ATOM | 3228 | OG1 | THR A 416 | 18.291 | 65.262 | 91.363 | 1.00 | 21.52 | O |
| ATOM | 3229 | CG2 | THR A 416 | 19.058 | 67.025 | 89.897 | 1.00 | 20.81 | C |
| ATOM | 3230 | N | ALA A 417 | 16.537 | 63.512 | 88.678 | 1.00 | 22.24 | N |
| ATOM | 3231 | CA | ALA A 417 | 15.741 | 62.311 | 88.610 | 1.00 | 22.34 | C |
| ATOM | 3232 | C | ALA A 417 | 16.090 | 60.997 | 89.308 | 1.00 | 23.79 | C |
| ATOM | 3233 | O | ALA A 417 | 15.174 | 60.258 | 89.684 | 1.00 | 23.54 | O |
| ATOM | 3234 | CB | ALA A 417 | 15.484 | 62.027 | 87.174 | 1.00 | 23.24 | C |
| ATOM | 3235 | N | LEU A 418 | 17.363 | 60.659 | 89.451 | 1.00 | 24.32 | N |
| ATOM | 3236 | CA | LEU A 418 | 17.665 | 59.361 | 90.078 | 1.00 | 23.45 | C |
| ATOM | 3237 | C | LEU A 418 | 17.449 | 59.339 | 91.605 | 1.00 | 24.94 | C |
| ATOM | 3238 | O | LEU A 418 | 17.005 | 58.314 | 92.161 | 1.00 | 24.44 | O |
| ATOM | 3239 | CB | LEU A 418 | 19.082 | 58.891 | 89.706 | 1.00 | 23.54 | C |
| ATOM | 3240 | CG | LEU A 418 | 19.294 | 58.416 | 88.260 | 1.00 | 23.25 | C |
| ATOM | 3241 | CD1 | LEU A 418 | 20.723 | 57.932 | 88.076 | 1.00 | 24.79 | C |
| ATOM | 3242 | CD2 | LEU A 418 | 18.311 | 57.281 | 87.939 | 1.00 | 22.76 | C |
| ATOM | 3243 | N | THR A 419 | 17.729 | 60.449 | 92.288 | 1.00 | 25.00 | N |
| ATOM | 3244 | CA | THR A 419 | 17.540 | 60.493 | 93.747 | 1.00 | 27.33 | C |
| ATOM | 3245 | C | THR A 419 | 16.057 | 60.273 | 94.054 | 1.00 | 26.89 | C |
| ATOM | 3246 | O | THR A 419 | 15.203 | 61.025 | 93.594 | 1.00 | 24.48 | O |
| ATOM | 3247 | CB | THR A 419 | 18.014 | 61.864 | 94.321 | 1.00 | 28.46 | C |
| ATOM | 3248 | OG1 | THR A 419 | 19.408 | 62.014 | 94.051 | 1.00 | 28.55 | O |
| ATOM | 3249 | CG2 | THR A 419 | 17.802 | 61.963 | 95.821 | 1.00 | 28.44 | C |
| ATOM | 3250 | N | GLY A 420 | 15.751 | 59.224 | 94.814 | 1.00 | 27.00 | N |
| ATOM | 3251 | CA | GLY A 420 | 14.358 | 58.959 | 95.137 | 1.00 | 26.86 | C |
| ATOM | 3252 | C | GLY A 420 | 13.605 | 58.151 | 94.093 | 1.00 | 26.38 | C |
| ATOM | 3253 | O | GLY A 420 | 12.375 | 58.003 | 94.171 | 1.00 | 25.87 | O |
| ATOM | 3254 | N | SER A 421 | 14.323 | 57.645 | 93.095 | 1.00 | 25.25 | N |
| ATOM | 3255 | CA | SER A 421 | 13.683 | 56.826 | 92.052 | 1.00 | 25.04 | C |
| ATOM | 3256 | C | SER A 421 | 13.534 | 55.383 | 92.555 | 1.00 | 25.37 | C |
| ATOM | 3257 | O | SER A 421 | 14.274 | 54.962 | 93.438 | 1.00 | 23.14 | O |
| ATOM | 3258 | CB | SER A 421 | 14.549 | 56.797 | 90.791 | 1.00 | 24.54 | C |
| ATOM | 3259 | OG | SER A 421 | 15.828 | 56.210 | 91.050 | 1.00 | 23.69 | O |
| ATOM | 3260 | N | THR A 422 | 12.593 | 54.631 | 91.991 | 1.00 | 25.60 | N |
| ATOM | 3261 | CA | THR A 422 | 12.438 | 53.239 | 92.397 | 1.00 | 25.42 | C |
| ATOM | 3262 | C | THR A 422 | 13.657 | 52.433 | 91.950 | 1.00 | 26.29 | C |
| ATOM | 3263 | O | THR A 422 | 13.960 | 51.354 | 92.491 | 1.00 | 25.25 | O |
| ATOM | 3264 | CB | THR A 422 | 11.180 | 52.619 | 91.797 | 1.00 | 25.39 | C |
| ATOM | 3265 | OG1 | THR A 422 | 11.269 | 52.624 | 90.365 | 1.00 | 24.71 | O |
| ATOM | 3266 | CG2 | THR A 422 | 9.960 | 53.396 | 92.241 | 1.00 | 24.94 | C |
| ATOM | 3267 | N | GLU A 423 | 14.360 | 52.940 | 90.950 | 1.00 | 24.56 | N |
| ATOM | 3268 | CA | GLU A 423 | 15.527 | 52.223 | 90.502 | 1.00 | 26.48 | C |
| ATOM | 3269 | C | GLU A 423 | 16.544 | 52.241 | 91.640 | 1.00 | 28.90 | C |
| ATOM | 3270 | O | GLU A 423 | 17.202 | 51.250 | 91.911 | 1.00 | 28.88 | O |
| ATOM | 3271 | CB | GLU A 423 | 16.116 | 52.858 | 89.240 | 1.00 | 24.37 | C |
| ATOM | 3272 | CG | GLU A 423 | 17.394 | 52.175 | 88.748 | 1.00 | 21.15 | C |
| ATOM | 3273 | CD | GLU A 423 | 17.714 | 52.540 | 87.320 | 1.00 | 22.21 | C |

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ATOM   3274  OE1 GLU A 423      17.002  52.037  86.408  1.00 20.19           O
ATOM   3275  OE2 GLU A 423      18.670  53.343  87.113  1.00 17.32           O
ATOM   3276  N   GLU A 424      16.660  53.379  92.302  1.00 30.57           N
ATOM   3277  CA  GLU A 424      17.599  53.536  93.413  1.00 33.10           C
ATOM   3278  C   GLU A 424      17.212  52.688  94.594  1.00 32.38           C
ATOM   3279  O   GLU A 424      18.054  52.110  95.269  1.00 31.78           O
ATOM   3280  CB  GLU A 424      17.578  54.962  93.948  1.00 36.64           C
ATOM   3281  CG  GLU A 424      18.103  55.985  93.024  1.00 44.01           C
ATOM   3282  CD  GLU A 424      19.594  56.028  93.016  1.00 47.23           C
ATOM   3283  OE1 GLU A 424      20.189  56.573  93.983  1.00 50.65           O
ATOM   3284  OE2 GLU A 424      20.167  55.507  92.033  1.00 50.40           O
ATOM   3285  N   GLY A 425      15.924  52.682  94.870  1.00 31.80           N
ATOM   3286  CA  GLY A 425      15.448  51.972  96.030  1.00 33.31           C
ATOM   3287  C   GLY A 425      15.165  50.505  95.855  1.00 33.50           C
ATOM   3288  O   GLY A 425      14.968  49.807  96.853  1.00 31.87           O
ATOM   3289  N   GLN A 426      15.167  50.025  94.611  1.00 32.65           N
ATOM   3290  CA  GLN A 426      14.836  48.636  94.367  1.00 31.98           C
ATOM   3291  C   GLN A 426      15.795  47.746  93.567  1.00 32.21           C
ATOM   3292  O   GLN A 426      15.558  46.531  93.499  1.00 33.16           O
ATOM   3293  CB  GLN A 426      13.449  48.582  93.745  1.00 29.95           C
ATOM   3294  CG  GLN A 426      12.421  49.282  94.601  1.00 29.27           C
ATOM   3295  CD  GLN A 426      11.025  49.184  94.036  1.00 28.83           C
ATOM   3296  OE1 GLN A 426      10.670  48.191  93.377  1.00 25.51           O
ATOM   3297  NE2 GLN A 426      10.203  50.202  94.311  1.00 26.09           N
ATOM   3298  N   PHE A 427      16.851  48.312  92.975  1.00 30.23           N
ATOM   3299  CA  PHE A 427      17.806  47.519  92.180  1.00 32.20           C
ATOM   3300  C   PHE A 427      19.238  47.578  92.738  1.00 34.17           C
ATOM   3301  O   PHE A 427      20.010  46.613  92.537  1.00 37.52           O
ATOM   3302  CB  PHE A 427      17.791  47.970  90.695  1.00 29.13           C
ATOM   3303  CG  PHE A 427      16.451  47.768  90.005  1.00 26.93           C
ATOM   3304  CD1 PHE A 427      15.317  48.449  90.443  1.00 25.02           C
ATOM   3305  CD2 PHE A 427      16.314  46.853  88.960  1.00 24.41           C
ATOM   3306  CE1 PHE A 427      14.064  48.214  89.861  1.00 24.42           C
ATOM   3307  CE2 PHE A 427      15.063  46.615  88.377  1.00 23.03           C
ATOM   3308  CZ  PHE A 427      13.949  47.285  88.822  1.00 24.51           C
TER    3309      PHE A 427
ATOM   3310  N   ALA B   1     -16.761  73.904  45.544  1.00 50.60           N
ATOM   3311  CA  ALA B   1     -17.484  73.461  46.769  1.00 49.80           C
ATOM   3312  C   ALA B   1     -18.006  72.043  46.599  1.00 49.22           C
ATOM   3313  O   ALA B   1     -18.308  71.598  45.491  1.00 49.67           O
ATOM   3314  CB  ALA B   1     -18.635  74.401  47.076  1.00 50.19           C
ATOM   3315  N   SER B   2     -18.138  71.356  47.724  1.00 47.14           N
ATOM   3316  CA  SER B   2     -18.573  69.969  47.754  1.00 45.05           C
ATOM   3317  C   SER B   2     -19.221  69.754  49.116  1.00 42.95           C
ATOM   3318  O   SER B   2     -19.210  70.647  49.962  1.00 43.23           O
ATOM   3319  CB  SER B   2     -17.324  69.074  47.587  1.00 44.67           C
ATOM   3320  OG  SER B   2     -17.549  67.731  47.960  1.00 43.14           O
ATOM   3321  N   VAL B   3     -19.794  68.587  49.344  1.00 40.00           N
ATOM   3322  CA  VAL B   3     -20.373  68.356  50.645  1.00 38.16           C
ATOM   3323  C   VAL B   3     -19.578  67.272  51.391  1.00 36.18           C
ATOM   3324  O   VAL B   3     -19.880  66.942  52.532  1.00 35.87           O
ATOM   3325  CB  VAL B   3     -21.874  68.012  50.526  1.00 38.43           C
ATOM   3326  CG1 VAL B   3     -22.584  69.136  49.819  1.00 39.48           C
ATOM   3327  CG2 VAL B   3     -22.078  66.745  49.763  1.00 38.88           C
ATOM   3328  N   VAL B   4     -18.547  66.723  50.751  1.00 33.94           N
ATOM   3329  CA  VAL B   4     -17.730  65.707  51.420  1.00 30.78           C
ATOM   3330  C   VAL B   4     -17.141  66.385  52.649  1.00 28.72           C
ATOM   3331  O   VAL B   4     -16.691  67.506  52.556  1.00 26.21           O
ATOM   3332  CB  VAL B   4     -16.582  65.209  50.501  1.00 30.57           C
ATOM   3333  CG1 VAL B   4     -15.604  64.361  51.282  1.00 29.28           C
ATOM   3334  CG2 VAL B   4     -17.158  64.379  49.368  1.00 30.10           C
ATOM   3335  N   GLY B   5     -17.197  65.719  53.795  1.00 28.76           N
ATOM   3336  CA  GLY B   5     -16.652  66.277  55.026  1.00 29.71           C
ATOM   3337  C   GLY B   5     -17.389  67.425  55.716  1.00 30.39           C
ATOM   3338  O   GLY B   5     -16.905  67.954  56.712  1.00 29.91           O
ATOM   3339  N   THR B   6     -18.559  67.821  55.223  1.00 30.96           N
ATOM   3340  CA  THR B   6     -19.272  68.932  55.862  1.00 30.67           C
ATOM   3341  C   THR B   6     -19.483  68.629  57.335  1.00 30.10           C
ATOM   3342  O   THR B   6     -19.809  67.505  57.708  1.00 30.72           O
ATOM   3343  CB  THR B   6     -20.643  69.186  55.215  1.00 31.87           C
ATOM   3344  OG1 THR B   6     -20.514  69.166  53.788  1.00 33.89           O
ATOM   3345  CG2 THR B   6     -21.173  70.527  55.643  1.00 29.85           C
ATOM   3346  N   PRO B   7     -19.304  69.637  58.198  1.00 30.79           N
ATOM   3347  CA  PRO B   7     -19.471  69.456  59.648  1.00 31.90           C
ATOM   3348  C   PRO B   7     -20.914  69.166  60.057  1.00 32.44           C
ATOM   3349  O   PRO B   7     -21.836  69.636  59.400  1.00 32.64           O
ATOM   3350  CB  PRO B   7     -19.013  70.795  60.235  1.00 31.66           C
ATOM   3351  CG  PRO B   7     -18.339  71.531  59.080  1.00 31.66           C
ATOM   3352  CD  PRO B   7     -18.993  71.033  57.849  1.00 30.31           C
ATOM   3353  N   LYS B   8     -21.100  68.398  61.133  1.00 32.25           N
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| ATOM | 3354 | CA | LYS B | 8 | -22.436 | 68.116 | 61.662 | 1.00 | 32.96 | C |
|------|------|-----|-------|----|---------|--------|--------|------|-------|---|
| ATOM | 3355 | C | LYS B | 8 | -22.918 | 69.438 | 62.271 | 1.00 | 33.23 | C |
| ATOM | 3356 | O | LYS B | 8 | -22.124 | 70.341 | 62.496 | 1.00 | 34.05 | O |
| ATOM | 3357 | CB | LYS B | 8 | -22.388 | 67.100 | 62.800 | 1.00 | 33.62 | C |
| ATOM | 3358 | CG | LYS B | 8 | -21.823 | 65.756 | 62.477 | 1.00 | 34.61 | C |
| ATOM | 3359 | CD | LYS B | 8 | -21.559 | 65.007 | 63.760 | 1.00 | 35.21 | C |
| ATOM | 3360 | CE | LYS B | 8 | -21.014 | 63.635 | 63.482 | 1.00 | 35.79 | C |
| ATOM | 3361 | NZ | LYS B | 8 | -20.768 | 62.926 | 64.767 | 1.00 | 38.27 | N |
| ATOM | 3362 | N | SER B | 9 | -24.215 | 69.549 | 62.555 | 1.00 | 33.91 | N |
| ATOM | 3363 | CA | SER B | 9 | -24.729 | 70.773 | 63.173 | 1.00 | 32.70 | C |
| ATOM | 3364 | C | SER B | 9 | -24.493 | 70.654 | 64.702 | 1.00 | 31.38 | C |
| ATOM | 3365 | O | SER B | 9 | -24.272 | 69.548 | 65.218 | 1.00 | 32.24 | O |
| ATOM | 3366 | CB | SER B | 9 | -26.238 | 70.908 | 62.873 | 1.00 | 32.64 | C |
| ATOM | 3367 | OG | SER B | 9 | -26.959 | 69.881 | 63.525 | 1.00 | 32.00 | O |
| ATOM | 3368 | N | ALA B | 10 | -24.519 | 71.778 | 65.412 | 1.00 | 31.83 | N |
| ATOM | 3369 | CA | ALA B | 10 | -24.360 | 71.771 | 66.875 | 1.00 | 31.87 | C |
| ATOM | 3370 | C | ALA B | 10 | -25.498 | 70.952 | 67.489 | 1.00 | 32.26 | C |
| ATOM | 3371 | O | ALA B | 10 | -25.328 | 70.309 | 68.517 | 1.00 | 32.61 | O |
| ATOM | 3372 | CB | ALA B | 10 | -24.403 | 73.196 | 67.414 | 1.00 | 31.67 | C |
| ATOM | 3373 | N | GLU B | 11 | -26.668 | 70.993 | 66.846 | 1.00 | 34.24 | N |
| ATOM | 3374 | CA | GLU B | 11 | -27.849 | 70.252 | 67.289 | 1.00 | 35.30 | C |
| ATOM | 3375 | C | GLU B | 11 | -27.535 | 68.756 | 67.306 | 1.00 | 35.47 | C |
| ATOM | 3376 | O | GLU B | 11 | -27.839 | 68.030 | 68.270 | 1.00 | 34.30 | O |
| ATOM | 3377 | CB | GLU B | 11 | -29.015 | 70.500 | 66.312 | 1.00 | 38.59 | C |
| ATOM | 3378 | CG | GLU B | 11 | -29.604 | 71.923 | 66.282 | 1.00 | 42.86 | C |
| ATOM | 3379 | CD | GLU B | 11 | -28.593 | 73.028 | 65.934 | 1.00 | 45.58 | C |
| ATOM | 3380 | OE1 | GLU B | 11 | -27.824 | 72.877 | 64.961 | 1.00 | 45.02 | O |
| ATOM | 3381 | OE2 | GLU B | 11 | -28.590 | 74.072 | 66.638 | 1.00 | 48.31 | O |
| ATOM | 3382 | N | GLN B | 12 | -26.945 | 68.304 | 66.206 | 1.00 | 34.71 | N |
| ATOM | 3383 | CA | GLN B | 12 | -26.552 | 66.907 | 66.039 | 1.00 | 36.68 | C |
| ATOM | 3384 | C | GLN B | 12 | -25.559 | 66.452 | 67.136 | 1.00 | 34.95 | C |
| ATOM | 3385 | O | GLN B | 12 | -25.686 | 65.365 | 67.718 | 1.00 | 35.45 | O |
| ATOM | 3386 | CB | GLN B | 12 | -25.900 | 66.726 | 64.661 | 1.00 | 38.31 | C |
| ATOM | 3387 | CG | GLN B | 12 | -26.719 | 67.253 | 63.488 | 1.00 | 41.71 | C |
| ATOM | 3388 | CD | GLN B | 12 | -26.048 | 66.982 | 62.149 | 1.00 | 42.76 | C |
| ATOM | 3389 | OE1 | GLN B | 12 | -25.620 | 65.856 | 61.879 | 1.00 | 45.50 | O |
| ATOM | 3390 | NE2 | GLN B | 12 | -25.961 | 68.002 | 61.304 | 1.00 | 43.27 | N |
| ATOM | 3391 | N | ILE B | 13 | -24.569 | 67.288 | 67.410 | 1.00 | 34.82 | N |
| ATOM | 3392 | CA | ILE B | 13 | -23.567 | 66.957 | 68.413 | 1.00 | 33.53 | C |
| ATOM | 3393 | C | ILE B | 13 | -24.213 | 66.890 | 69.800 | 1.00 | 33.17 | C |
| ATOM | 3394 | O | ILE B | 13 | -24.030 | 65.932 | 70.556 | 1.00 | 31.07 | O |
| ATOM | 3395 | CB | ILE B | 13 | -22.464 | 68.015 | 68.415 | 1.00 | 34.35 | C |
| ATOM | 3396 | CG1 | ILE B | 13 | -21.849 | 68.113 | 67.014 | 1.00 | 35.40 | C |
| ATOM | 3397 | CG2 | ILE B | 13 | -21.399 | 67.644 | 69.430 | 1.00 | 35.05 | C |
| ATOM | 3398 | CD1 | ILE B | 13 | -20.644 | 69.049 | 66.910 | 1.00 | 35.73 | C |
| ATOM | 3399 | N | GLN B | 14 | -24.989 | 67.917 | 70.121 | 1.00 | 33.73 | N |
| ATOM | 3400 | CA | GLN B | 14 | -25.674 | 67.990 | 71.416 | 1.00 | 34.26 | C |
| ATOM | 3401 | C | GLN B | 14 | -26.477 | 66.729 | 71.665 | 1.00 | 33.85 | C |
| ATOM | 3402 | O | GLN B | 14 | -26.492 | 66.186 | 72.764 | 1.00 | 33.64 | O |
| ATOM | 3403 | CB | GLN B | 14 | -26.615 | 69.194 | 71.446 | 1.00 | 33.71 | C |
| ATOM | 3404 | CG | GLN B | 14 | -27.149 | 69.479 | 72.830 | 1.00 | 34.74 | C |
| ATOM | 3405 | CD | GLN B | 14 | -26.057 | 69.909 | 73.778 | 1.00 | 34.37 | C |
| ATOM | 3406 | OE1 | GLN B | 14 | -25.439 | 70.963 | 73.594 | 1.00 | 37.59 | O |
| ATOM | 3407 | NE2 | GLN B | 14 | -25.802 | 69.098 | 74.789 | 1.00 | 34.73 | N |
| ATOM | 3408 | N | GLN B | 15 | -27.135 | 66.266 | 70.614 | 1.00 | 35.77 | N |
| ATOM | 3409 | CA | GLN B | 15 | -27.956 | 65.080 | 70.671 | 1.00 | 37.26 | C |
| ATOM | 3410 | C | GLN B | 15 | -27.161 | 63.815 | 70.990 | 1.00 | 37.19 | C |
| ATOM | 3411 | O | GLN B | 15 | -27.567 | 63.016 | 71.850 | 1.00 | 37.29 | O |
| ATOM | 3412 | CB | GLN B | 15 | -28.706 | 64.924 | 69.341 | 1.00 | 39.83 | C |
| ATOM | 3413 | CG | GLN B | 15 | -29.899 | 64.002 | 69.420 | 1.00 | 42.63 | C |
| ATOM | 3414 | CD | GLN B | 15 | -30.740 | 64.032 | 68.161 | 1.00 | 45.79 | C |
| ATOM | 3415 | OE1 | GLN B | 15 | -31.025 | 65.110 | 67.603 | 1.00 | 46.87 | O |
| ATOM | 3416 | NE2 | GLN B | 15 | -31.161 | 62.850 | 67.706 | 1.00 | 46.87 | N |
| ATOM | 3417 | N | GLU B | 16 | -26.040 | 63.618 | 70.297 | 1.00 | 36.74 | N |
| ATOM | 3418 | CA | GLU B | 16 | -25.203 | 62.436 | 70.544 | 1.00 | 37.41 | C |
| ATOM | 3419 | C | GLU B | 16 | -24.704 | 62.467 | 71.987 | 1.00 | 35.86 | C |
| ATOM | 3420 | O | GLU B | 16 | -24.692 | 61.445 | 72.680 | 1.00 | 36.23 | O |
| ATOM | 3421 | CB | GLU B | 16 | -23.992 | 62.402 | 69.597 | 1.00 | 39.42 | C |
| ATOM | 3422 | CG | GLU B | 16 | -24.329 | 62.290 | 68.117 | 1.00 | 43.46 | C |
| ATOM | 3423 | CD | GLU B | 16 | -23.123 | 61.871 | 67.282 | 1.00 | 46.58 | C |
| ATOM | 3424 | OE1 | GLU B | 16 | -22.587 | 60.757 | 67.533 | 1.00 | 49.23 | O |
| ATOM | 3425 | OE2 | GLU B | 16 | -22.709 | 62.641 | 66.383 | 1.00 | 46.56 | O |
| ATOM | 3426 | N | TRP B | 17 | -24.307 | 63.655 | 72.431 | 1.00 | 35.13 | N |
| ATOM | 3427 | CA | TRP B | 17 | -23.811 | 63.839 | 73.788 | 1.00 | 36.18 | C |
| ATOM | 3428 | C | TRP B | 17 | -24.866 | 63.473 | 74.825 | 1.00 | 36.92 | C |
| ATOM | 3429 | O | TRP B | 17 | -24.552 | 62.935 | 75.888 | 1.00 | 37.70 | O |
| ATOM | 3430 | CB | TRP B | 17 | -23.385 | 65.292 | 74.003 | 1.00 | 35.31 | C |
| ATOM | 3431 | CG | TRP B | 17 | -22.096 | 65.687 | 73.319 | 1.00 | 34.02 | C |
| ATOM | 3432 | CD1 | TRP B | 17 | -21.257 | 64.873 | 72.598 | 1.00 | 34.34 | C |
| ATOM | 3433 | CD2 | TRP B | 17 | -21.517 | 67.000 | 73.277 | 1.00 | 34.61 | C |

| ATOM | 3434 | NE1 | TRP | B | 17 | -20.195 | 65.610 | 72.104 | 1.00 | 34.94 | N |
| ATOM | 3435 | CE2 | TRP | B | 17 | -20.330 | 66.916 | 72.504 | 1.00 | 34.59 | C |
| ATOM | 3436 | CE3 | TRP | B | 17 | -21.883 | 68.243 | 73.814 | 1.00 | 34.60 | C |
| ATOM | 3437 | CZ2 | TRP | B | 17 | -19.514 | 68.033 | 72.253 | 1.00 | 34.61 | C |
| ATOM | 3438 | CZ3 | TRP | B | 17 | -21.063 | 69.361 | 73.561 | 1.00 | 33.28 | C |
| ATOM | 3439 | CH2 | TRP | B | 17 | -19.894 | 69.237 | 72.783 | 1.00 | 33.22 | C |
| ATOM | 3440 | N   | ASP | B | 18 | -26.124 | 63.738 | 74.499 | 1.00 | 38.43 | N |
| ATOM | 3441 | CA  | ASP | B | 18 | -27.213 | 63.461 | 75.418 | 1.00 | 39.22 | C |
| ATOM | 3442 | C   | ASP | B | 18 | -27.782 | 62.046 | 75.353 | 1.00 | 39.51 | C |
| ATOM | 3443 | O   | ASP | B | 18 | -28.367 | 61.572 | 76.334 | 1.00 | 39.25 | O |
| ATOM | 3444 | CB  | ASP | B | 18 | -28.346 | 64.467 | 75.205 | 1.00 | 41.16 | C |
| ATOM | 3445 | CG  | ASP | B | 18 | -27.916 | 65.906 | 75.462 | 1.00 | 42.45 | C |
| ATOM | 3446 | OD1 | ASP | B | 18 | -27.107 | 66.147 | 76.379 | 1.00 | 43.30 | O |
| ATOM | 3447 | OD2 | ASP | B | 18 | -28.407 | 66.807 | 74.754 | 1.00 | 44.91 | O |
| ATOM | 3448 | N   | THR | B | 19 | -27.598 | 61.360 | 74.226 | 1.00 | 38.96 | N |
| ATOM | 3449 | CA  | THR | B | 19 | -28.150 | 60.016 | 74.085 | 1.00 | 38.92 | C |
| ATOM | 3450 | C   | THR | B | 19 | -27.161 | 58.851 | 74.047 | 1.00 | 38.42 | C |
| ATOM | 3451 | O   | THR | B | 19 | -27.519 | 57.730 | 74.413 | 1.00 | 39.08 | O |
| ATOM | 3452 | CB  | THR | B | 19 | -29.031 | 59.939 | 72.832 | 1.00 | 39.54 | C |
| ATOM | 3453 | OG1 | THR | B | 19 | -28.207 | 59.921 | 71.664 | 1.00 | 40.41 | O |
| ATOM | 3454 | CG2 | THR | B | 19 | -29.928 | 61.153 | 72.758 | 1.00 | 38.98 | C |
| ATOM | 3455 | N   | ASN | B | 20 | -25.930 | 59.099 | 73.602 | 1.00 | 37.21 | N |
| ATOM | 3456 | CA  | ASN | B | 20 | -24.932 | 58.030 | 73.544 | 1.00 | 36.26 | C |
| ATOM | 3457 | C   | ASN | B | 20 | -24.409 | 57.654 | 74.946 | 1.00 | 35.20 | C |
| ATOM | 3458 | O   | ASN | B | 20 | -23.854 | 58.493 | 75.676 | 1.00 | 34.19 | O |
| ATOM | 3459 | CB  | ASN | B | 20 | -23.757 | 58.453 | 72.643 | 1.00 | 35.34 | C |
| ATOM | 3460 | CG  | ASN | B | 20 | -22.854 | 57.283 | 72.273 | 1.00 | 36.57 | C |
| ATOM | 3461 | OD1 | ASN | B | 20 | -22.796 | 56.268 | 72.982 | 1.00 | 34.76 | O |
| ATOM | 3462 | ND2 | ASN | B | 20 | -22.138 | 57.421 | 71.159 | 1.00 | 36.85 | N |
| ATOM | 3463 | N   | PRO | B | 21 | -24.613 | 56.394 | 75.353 | 1.00 | 34.38 | N |
| ATOM | 3464 | CA  | PRO | B | 21 | -24.171 | 55.881 | 76.656 | 1.00 | 33.91 | C |
| ATOM | 3465 | C   | PRO | B | 21 | -22.691 | 56.175 | 76.900 | 1.00 | 33.44 | C |
| ATOM | 3466 | O   | PRO | B | 21 | -22.235 | 56.273 | 78.053 | 1.00 | 31.82 | O |
| ATOM | 3467 | CB  | PRO | B | 21 | -24.453 | 54.393 | 76.541 | 1.00 | 35.30 | C |
| ATOM | 3468 | CG  | PRO | B | 21 | -25.741 | 54.405 | 75.738 | 1.00 | 36.25 | C |
| ATOM | 3469 | CD  | PRO | B | 21 | -25.420 | 55.385 | 74.639 | 1.00 | 35.37 | C |
| ATOM | 3470 | N   | ARG | B | 22 | -21.958 | 56.304 | 75.795 | 1.00 | 31.90 | N |
| ATOM | 3471 | CA  | ARG | B | 22 | -20.527 | 56.603 | 75.829 | 1.00 | 31.28 | C |
| ATOM | 3472 | C   | ARG | B | 22 | -20.232 | 57.829 | 76.686 | 1.00 | 30.67 | C |
| ATOM | 3473 | O   | ARG | B | 22 | -19.227 | 57.852 | 77.404 | 1.00 | 30.20 | O |
| ATOM | 3474 | CB  | ARG | B | 22 | -20.000 | 56.863 | 74.413 | 1.00 | 29.07 | C |
| ATOM | 3475 | CG  | ARG | B | 22 | -18.550 | 57.354 | 74.356 | 1.00 | 27.02 | C |
| ATOM | 3476 | CD  | ARG | B | 22 | -17.601 | 56.288 | 74.906 | 1.00 | 26.94 | C |
| ATOM | 3477 | NE  | ARG | B | 22 | -16.204 | 56.703 | 74.743 | 1.00 | 26.73 | N |
| ATOM | 3478 | CZ  | ARG | B | 22 | -15.547 | 57.478 | 75.598 | 1.00 | 27.93 | C |
| ATOM | 3479 | NH1 | ARG | B | 22 | -16.154 | 57.919 | 76.700 | 1.00 | 24.56 | N |
| ATOM | 3480 | NH2 | ARG | B | 22 | -14.286 | 57.835 | 75.339 | 1.00 | 22.51 | N |
| ATOM | 3481 | N   | TRP | B | 23 | -21.107 | 58.832 | 76.609 | 1.00 | 31.78 | N |
| ATOM | 3482 | CA  | TRP | B | 23 | -20.931 | 60.088 | 77.349 | 1.00 | 32.42 | C |
| ATOM | 3483 | C   | TRP | B | 23 | -21.696 | 60.193 | 78.672 | 1.00 | 33.75 | C |
| ATOM | 3484 | O   | TRP | B | 23 | -21.734 | 61.251 | 79.298 | 1.00 | 33.01 | O |
| ATOM | 3485 | CB  | TRP | B | 23 | -21.333 | 61.243 | 76.461 | 1.00 | 30.89 | C |
| ATOM | 3486 | CG  | TRP | B | 23 | -20.770 | 61.112 | 75.111 | 1.00 | 31.27 | C |
| ATOM | 3487 | CD1 | TRP | B | 23 | -21.460 | 61.000 | 73.937 | 1.00 | 30.85 | C |
| ATOM | 3488 | CD2 | TRP | B | 23 | -19.373 | 61.063 | 74.768 | 1.00 | 31.04 | C |
| ATOM | 3489 | NE1 | TRP | B | 23 | -20.579 | 60.882 | 72.879 | 1.00 | 30.44 | N |
| ATOM | 3490 | CE2 | TRP | B | 23 | -19.294 | 60.916 | 73.358 | 1.00 | 30.85 | C |
| ATOM | 3491 | CE3 | TRP | B | 23 | -18.186 | 61.128 | 75.513 | 1.00 | 29.74 | C |
| ATOM | 3492 | CZ2 | TRP | B | 23 | -18.066 | 60.830 | 72.675 | 1.00 | 29.24 | C |
| ATOM | 3493 | CZ3 | TRP | B | 23 | -16.961 | 61.042 | 74.834 | 1.00 | 28.73 | C |
| ATOM | 3494 | CH2 | TRP | B | 23 | -16.915 | 60.894 | 73.430 | 1.00 | 29.34 | C |
| ATOM | 3495 | N   | LYS | B | 24 | -22.291 | 59.086 | 79.096 | 1.00 | 36.41 | N |
| ATOM | 3496 | CA  | LYS | B | 24 | -23.053 | 59.019 | 80.350 | 1.00 | 37.86 | C |
| ATOM | 3497 | C   | LYS | B | 24 | -22.422 | 59.739 | 81.574 | 1.00 | 39.18 | C |
| ATOM | 3498 | O   | LYS | B | 24 | -23.117 | 60.419 | 82.331 | 1.00 | 40.45 | O |
| ATOM | 3499 | CB  | LYS | B | 24 | -23.291 | 57.546 | 80.696 | 1.00 | 38.37 | C |
| ATOM | 3500 | CG  | LYS | B | 24 | -24.113 | 57.320 | 81.941 | 1.00 | 41.59 | C |
| ATOM | 3501 | CD  | LYS | B | 24 | -24.148 | 55.843 | 82.340 | 1.00 | 42.97 | C |
| ATOM | 3502 | CE  | LYS | B | 24 | -22.893 | 55.448 | 83.103 | 1.00 | 44.44 | C |
| ATOM | 3503 | NZ  | LYS | B | 24 | -22.932 | 54.062 | 83.621 | 1.00 | 45.28 | N |
| ATOM | 3504 | N   | ASP | B | 25 | -21.119 | 59.583 | 81.794 | 1.00 | 38.83 | N |
| ATOM | 3505 | CA  | ASP | B | 25 | -20.476 | 60.233 | 82.946 | 1.00 | 38.47 | C |
| ATOM | 3506 | C   | ASP | B | 25 | -19.459 | 61.321 | 82.534 | 1.00 | 37.08 | C |
| ATOM | 3507 | O   | ASP | B | 25 | -18.603 | 61.710 | 83.327 | 1.00 | 36.07 | O |
| ATOM | 3508 | CB  | ASP | B | 25 | -19.750 | 59.175 | 83.782 | 1.00 | 39.43 | C |
| ATOM | 3509 | CG  | ASP | B | 25 | -20.638 | 57.996 | 84.130 | 1.00 | 40.72 | C |
| ATOM | 3510 | OD1 | ASP | B | 25 | -21.649 | 58.198 | 84.841 | 1.00 | 43.18 | O |
| ATOM | 3511 | OD2 | ASP | B | 25 | -20.320 | 56.868 | 83.698 | 1.00 | 40.22 | O |
| ATOM | 3512 | N   | VAL | B | 26 | -19.582 | 61.822 | 81.310 | 1.00 | 35.01 | N |
| ATOM | 3513 | CA  | VAL | B | 26 | -18.641 | 62.792 | 80.792 | 1.00 | 32.53 | C |

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ATOM   3514  C    VAL B   26     -19.086  64.242  80.832  1.00 30.57           C
ATOM   3515  O    VAL B   26     -20.007  64.644  80.155  1.00 30.35           O
ATOM   3516  CB   VAL B   26     -18.254  62.436  79.335  1.00 32.00           C
ATOM   3517  CG1  VAL B   26     -17.283  63.464  78.778  1.00 30.70           C
ATOM   3518  CG2  VAL B   26     -17.657  61.006  79.281  1.00 32.30           C
ATOM   3519  N    THR B   27     -18.399  65.043  81.627  1.00 29.48           N
ATOM   3520  CA   THR B   27     -18.714  66.452  81.697  1.00 28.77           C
ATOM   3521  C    THR B   27     -17.858  67.206  80.699  1.00 29.19           C
ATOM   3522  O    THR B   27     -16.648  66.938  80.573  1.00 27.24           O
ATOM   3523  CB   THR B   27     -18.394  67.025  83.079  1.00 30.23           C
ATOM   3524  OG1  THR B   27     -19.313  66.483  84.032  1.00 32.44           O
ATOM   3525  CG2  THR B   27     -18.454  68.566  83.054  1.00 29.75           C
ATOM   3526  N    ARG B   28     -18.480  68.176  80.033  1.00 29.36           N
ATOM   3527  CA   ARG B   28     -17.813  69.044  79.070  1.00 28.61           C
ATOM   3528  C    ARG B   28     -18.167  70.473  79.481  1.00 30.16           C
ATOM   3529  O    ARG B   28     -19.358  70.843  79.507  1.00 29.71           O
ATOM   3530  CB   ARG B   28     -18.322  68.764  77.653  1.00 27.86           C
ATOM   3531  CG   ARG B   28     -17.860  67.420  77.044  1.00 27.26           C
ATOM   3532  CD   ARG B   28     -18.546  67.224  75.672  1.00 28.09           C
ATOM   3533  NE   ARG B   28     -17.940  66.214  74.799  1.00 28.50           N
ATOM   3534  CZ   ARG B   28     -18.259  64.923  74.771  1.00 27.77           C
ATOM   3535  NH1  ARG B   28     -19.196  64.436  75.576  1.00 28.26           N
ATOM   3536  NH2  ARG B   28     -17.644  64.111  73.918  1.00 26.86           N
ATOM   3537  N    THR B   29     -17.147  71.275  79.800  1.00 29.63           N
ATOM   3538  CA   THR B   29     -17.375  72.658  80.229  1.00 29.81           C
ATOM   3539  C    THR B   29     -17.468  73.654  79.083  1.00 29.18           C
ATOM   3540  O    THR B   29     -17.405  74.853  79.313  1.00 30.57           O
ATOM   3541  CB   THR B   29     -16.288  73.181  81.253  1.00 31.40           C
ATOM   3542  OG1  THR B   29     -14.984  73.135  80.649  1.00 33.74           O
ATOM   3543  CG2  THR B   29     -16.290  72.337  82.532  1.00 29.79           C
ATOM   3544  N    TYR B   30     -17.595  73.156  77.854  1.00 28.72           N
ATOM   3545  CA   TYR B   30     -17.764  74.011  76.668  1.00 27.90           C
ATOM   3546  C    TYR B   30     -18.998  73.480  75.944  1.00 27.18           C
ATOM   3547  O    TYR B   30     -19.505  72.413  76.272  1.00 27.85           O
ATOM   3548  CB   TYR B   30     -16.529  73.971  75.745  1.00 27.12           C
ATOM   3549  CG   TYR B   30     -16.044  72.570  75.444  1.00 28.17           C
ATOM   3550  CD1  TYR B   30     -16.717  71.748  74.531  1.00 29.07           C
ATOM   3551  CD2  TYR B   30     -14.941  72.046  76.120  1.00 28.26           C
ATOM   3552  CE1  TYR B   30     -16.300  70.417  74.301  1.00 29.78           C
ATOM   3553  CE2  TYR B   30     -14.516  70.732  75.905  1.00 30.08           C
ATOM   3554  CZ   TYR B   30     -15.200  69.917  74.992  1.00 28.88           C
ATOM   3555  OH   TYR B   30     -14.768  68.616  74.796  1.00 30.30           O
ATOM   3556  N    SER B   31     -19.470  74.220  74.951  1.00 27.60           N
ATOM   3557  CA   SER B   31     -20.679  73.853  74.216  1.00 28.83           C
ATOM   3558  C    SER B   31     -20.502  73.115  72.901  1.00 29.87           C
ATOM   3559  O    SER B   31     -19.431  73.094  72.313  1.00 28.80           O
ATOM   3560  CB   SER B   31     -21.473  75.106  73.890  1.00 28.05           C
ATOM   3561  OG   SER B   31     -20.758  75.865  72.948  1.00 29.38           O
ATOM   3562  N    ALA B   32     -21.602  72.540  72.429  1.00 29.78           N
ATOM   3563  CA   ALA B   32     -21.589  71.853  71.151  1.00 30.79           C
ATOM   3564  C    ALA B   32     -21.274  72.962  70.134  1.00 30.32           C
ATOM   3565  O    ALA B   32     -20.480  72.770  69.196  1.00 29.35           O
ATOM   3566  CB   ALA B   32     -22.951  71.231  70.886  1.00 30.03           C
ATOM   3567  N    GLU B   33     -21.864  74.143  70.346  1.00 29.54           N
ATOM   3568  CA   GLU B   33     -21.621  75.271  69.445  1.00 29.75           C
ATOM   3569  C    GLU B   33     -20.141  75.612  69.361  1.00 29.87           C
ATOM   3570  O    GLU B   33     -19.620  75.905  68.282  1.00 28.53           O
ATOM   3571  CB   GLU B   33     -22.368  76.526  69.904  1.00 32.74           C
ATOM   3572  CG   GLU B   33     -23.905  76.495  69.727  1.00 36.32           C
ATOM   3573  CD   GLU B   33     -24.629  75.392  70.554  1.00 39.40           C
ATOM   3574  OE1  GLU B   33     -24.105  74.909  71.594  1.00 38.86           O
ATOM   3575  OE2  GLU B   33     -25.762  75.020  70.156  1.00 42.98           O
ATOM   3576  N    ASP B   34     -19.474  75.590  70.513  1.00 29.02           N
ATOM   3577  CA   ASP B   34     -18.049  75.914  70.565  1.00 28.82           C
ATOM   3578  C    ASP B   34     -17.225  74.964  69.693  1.00 27.56           C
ATOM   3579  O    ASP B   34     -16.257  75.389  69.081  1.00 28.05           O
ATOM   3580  CB   ASP B   34     -17.519  75.853  72.008  1.00 28.96           C
ATOM   3581  CG   ASP B   34     -18.030  76.992  72.868  1.00 31.31           C
ATOM   3582  OD1  ASP B   34     -18.325  78.075  72.293  1.00 32.41           O
ATOM   3583  OD2  ASP B   34     -18.122  76.802  74.116  1.00 33.32           O
ATOM   3584  N    VAL B   35     -17.615  73.687  69.663  1.00 27.39           N
ATOM   3585  CA   VAL B   35     -16.915  72.654  68.882  1.00 26.00           C
ATOM   3586  C    VAL B   35     -17.065  72.943  67.387  1.00 26.41           C
ATOM   3587  O    VAL B   35     -16.084  72.927  66.637  1.00 25.54           O
ATOM   3588  CB   VAL B   35     -17.465  71.227  69.202  1.00 27.57           C
ATOM   3589  CG1  VAL B   35     -16.878  70.199  68.248  1.00 24.86           C
ATOM   3590  CG2  VAL B   35     -17.134  70.831  70.655  1.00 25.94           C
ATOM   3591  N    VAL B   36     -18.298  73.212  66.951  1.00 23.96           N
ATOM   3592  CA   VAL B   36     -18.585  73.513  65.552  1.00 25.97           C
ATOM   3593  C    VAL B   36     -17.800  74.725  65.057  1.00 25.38           C
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| ATOM | 3594 | O   | VAL B | 36 | -17.268 | 74.741 | 63.938 | 1.00 28.26 | O |
| ATOM | 3595 | CB  | VAL B | 36 | -20.126 | 73.800 | 65.362 | 1.00 26.68 | C |
| ATOM | 3596 | CG1 | VAL B | 36 | -20.430 | 74.185 | 63.932 | 1.00 26.05 | C |
| ATOM | 3597 | CG2 | VAL B | 36 | -20.941 | 72.581 | 65.808 | 1.00 27.14 | C |
| ATOM | 3598 | N   | ALA B | 37 | -17.731 | 75.747 | 65.892 | 1.00 24.54 | N |
| ATOM | 3599 | CA  | ALA B | 37 | -17.023 | 76.978 | 65.550 | 1.00 24.31 | C |
| ATOM | 3600 | C   | ALA B | 37 | -15.546 | 76.728 | 65.207 | 1.00 25.24 | C |
| ATOM | 3601 | O   | ALA B | 37 | -14.939 | 77.497 | 64.451 | 1.00 23.93 | O |
| ATOM | 3602 | CB  | ALA B | 37 | -17.115 | 77.967 | 66.727 | 1.00 25.71 | C |
| ATOM | 3603 | N   | LEU B | 38 | -14.965 | 75.647 | 65.750 | 1.00 24.76 | N |
| ATOM | 3604 | CA  | LEU B | 38 | -13.541 | 75.421 | 65.487 | 1.00 25.80 | C |
| ATOM | 3605 | C   | LEU B | 38 | -13.286 | 74.435 | 64.333 | 1.00 27.17 | C |
| ATOM | 3606 | O   | LEU B | 38 | -12.132 | 74.234 | 63.908 | 1.00 25.83 | O |
| ATOM | 3607 | CB  | LEU B | 38 | -12.849 | 74.958 | 66.779 | 1.00 24.61 | C |
| ATOM | 3608 | CG  | LEU B | 38 | -12.802 | 75.989 | 67.927 | 1.00 22.63 | C |
| ATOM | 3609 | CD1 | LEU B | 38 | -12.587 | 75.247 | 69.257 | 1.00 24.60 | C |
| ATOM | 3610 | CD2 | LEU B | 38 | -11.715 | 77.047 | 67.694 | 1.00 22.57 | C |
| ATOM | 3611 | N   | GLN B | 39 | -14.368 | 73.896 | 63.773 | 1.00 26.41 | N |
| ATOM | 3612 | CA  | GLN B | 39 | -14.240 | 72.903 | 62.719 | 1.00 27.18 | C |
| ATOM | 3613 | C   | GLN B | 39 | -14.051 | 73.360 | 61.302 | 1.00 27.68 | C |
| ATOM | 3614 | O   | GLN B | 39 | -13.886 | 72.502 | 60.415 | 1.00 29.65 | O |
| ATOM | 3615 | CB  | GLN B | 39 | -15.429 | 71.946 | 62.761 | 1.00 26.03 | C |
| ATOM | 3616 | CG  | GLN B | 39 | -15.445 | 71.096 | 63.990 | 1.00 27.65 | C |
| ATOM | 3617 | CD  | GLN B | 39 | -16.617 | 70.163 | 64.013 | 1.00 28.76 | C |
| ATOM | 3618 | OE1 | GLN B | 39 | -17.711 | 70.553 | 63.620 | 1.00 31.86 | O |
| ATOM | 3619 | NE2 | GLN B | 39 | -16.412 | 68.925 | 64.485 | 1.00 28.23 | N |
| ATOM | 3620 | N   | GLY B | 40 | -14.049 | 74.670 | 61.058 | 1.00 27.16 | N |
| ATOM | 3621 | CA  | GLY B | 40 | -13.910 | 75.149 | 59.693 | 1.00 27.23 | C |
| ATOM | 3622 | C   | GLY B | 40 | -15.077 | 74.618 | 58.853 | 1.00 28.31 | C |
| ATOM | 3623 | O   | GLY B | 40 | -16.156 | 74.324 | 59.386 | 1.00 28.92 | O |
| ATOM | 3624 | N   | SER B | 41 | -14.879 | 74.472 | 57.552 | 1.00 27.84 | N |
| ATOM | 3625 | CA  | SER B | 41 | -15.950 | 73.978 | 56.685 | 1.00 27.98 | C |
| ATOM | 3626 | C   | SER B | 41 | -15.832 | 72.526 | 56.213 | 1.00 28.33 | C |
| ATOM | 3627 | O   | SER B | 41 | -16.721 | 72.011 | 55.513 | 1.00 25.88 | O |
| ATOM | 3628 | CB  | SER B | 41 | -16.077 | 74.887 | 55.475 | 1.00 28.58 | C |
| ATOM | 3629 | OG  | SER B | 41 | -14.953 | 74.786 | 54.643 | 1.00 32.96 | O |
| ATOM | 3630 | N   | VAL B | 42 | -14.730 | 71.874 | 56.592 | 1.00 27.06 | N |
| ATOM | 3631 | CA  | VAL B | 42 | -14.466 | 70.494 | 56.213 | 1.00 25.20 | C |
| ATOM | 3632 | C   | VAL B | 42 | -13.899 | 69.760 | 57.427 | 1.00 24.50 | C |
| ATOM | 3633 | O   | VAL B | 42 | -12.966 | 70.224 | 58.035 | 1.00 24.14 | O |
| ATOM | 3634 | CB  | VAL B | 42 | -13.409 | 70.414 | 55.055 | 1.00 25.87 | C |
| ATOM | 3635 | CG1 | VAL B | 42 | -13.283 | 68.989 | 54.578 | 1.00 26.19 | C |
| ATOM | 3636 | CG2 | VAL B | 42 | -13.784 | 71.308 | 53.888 | 1.00 24.80 | C |
| ATOM | 3637 | N   | VAL B | 43 | -14.464 | 68.618 | 57.781 | 1.00 23.82 | N |
| ATOM | 3638 | CA  | VAL B | 43 | -13.964 | 67.848 | 58.912 | 1.00 23.54 | C |
| ATOM | 3639 | C   | VAL B | 43 | -13.354 | 66.586 | 58.298 | 1.00 24.20 | C |
| ATOM | 3640 | O   | VAL B | 43 | -14.048 | 65.846 | 57.610 | 1.00 22.63 | O |
| ATOM | 3641 | CB  | VAL B | 43 | -15.109 | 67.421 | 59.872 | 1.00 24.18 | C |
| ATOM | 3642 | CG1 | VAL B | 43 | -14.647 | 66.343 | 60.828 | 1.00 24.75 | C |
| ATOM | 3643 | CG2 | VAL B | 43 | -15.604 | 68.608 | 60.674 | 1.00 25.61 | C |
| ATOM | 3644 | N   | GLU B | 44 | -12.061 | 66.334 | 58.521 | 1.00 22.58 | N |
| ATOM | 3645 | CA  | GLU B | 44 | -11.478 | 65.105 | 57.982 | 1.00 21.65 | C |
| ATOM | 3646 | C   | GLU B | 44 | -11.940 | 63.918 | 58.810 | 1.00 22.93 | C |
| ATOM | 3647 | O   | GLU B | 44 | -12.022 | 63.982 | 60.046 | 1.00 21.32 | O |
| ATOM | 3648 | CB  | GLU B | 44 | -9.931  | 65.155 | 58.012 | 1.00 21.04 | C |
| ATOM | 3649 | CG  | GLU B | 44 | -9.301  | 66.170 | 57.078 | 1.00 20.13 | C |
| ATOM | 3650 | CD  | GLU B | 44 | -7.748  | 66.129 | 57.151 | 1.00 22.41 | C |
| ATOM | 3651 | OE1 | GLU B | 44 | -7.190  | 66.769 | 58.053 | 1.00 22.24 | O |
| ATOM | 3652 | OE2 | GLU B | 44 | -7.112  | 65.438 | 56.331 | 1.00 19.61 | O |
| ATOM | 3653 | N   | GLU B | 45 | -12.235 | 62.820 | 58.126 | 1.00 21.93 | N |
| ATOM | 3654 | CA  | GLU B | 45 | -12.659 | 61.611 | 58.812 | 1.00 23.71 | C |
| ATOM | 3655 | C   | GLU B | 45 | -11.390 | 60.871 | 59.235 | 1.00 23.06 | C |
| ATOM | 3656 | O   | GLU B | 45 | -10.474 | 60.688 | 58.418 | 1.00 24.15 | O |
| ATOM | 3657 | CB  | GLU B | 45 | -13.496 | 60.739 | 57.861 | 1.00 23.96 | C |
| ATOM | 3658 | CG  | GLU B | 45 | -13.695 | 59.289 | 58.325 | 1.00 25.93 | C |
| ATOM | 3659 | CD  | GLU B | 45 | -14.592 | 59.188 | 59.540 | 1.00 28.06 | C |
| ATOM | 3660 | OE1 | GLU B | 45 | -14.989 | 60.240 | 60.056 | 1.00 30.78 | O |
| ATOM | 3661 | OE2 | GLU B | 45 | -14.893 | 58.064 | 59.981 | 1.00 28.46 | O |
| ATOM | 3662 | N   | HIS B | 46 | -11.335 | 60.471 | 60.502 | 1.00 21.39 | N |
| ATOM | 3663 | CA  | HIS B | 46 | -10.200 | 59.725 | 61.054 | 1.00 20.95 | C |
| ATOM | 3664 | C   | HIS B | 46 | -10.680 | 58.332 | 61.393 | 1.00 19.39 | C |
| ATOM | 3665 | O   | HIS B | 46 | -11.054 | 58.040 | 62.537 | 1.00 20.72 | O |
| ATOM | 3666 | CB  | HIS B | 46 | -9.666  | 60.411 | 62.311 | 1.00 18.66 | C |
| ATOM | 3667 | CG  | HIS B | 46 | -9.190  | 61.807 | 62.061 | 1.00 18.69 | C |
| ATOM | 3668 | ND1 | HIS B | 46 | -8.105  | 62.082 | 61.265 | 1.00 18.70 | N |
| ATOM | 3669 | CD2 | HIS B | 46 | -9.679  | 63.005 | 62.462 | 1.00 16.34 | C |
| ATOM | 3670 | CE1 | HIS B | 46 | -7.943  | 63.393 | 61.185 | 1.00 20.05 | C |
| ATOM | 3671 | NE2 | HIS B | 46 | -8.883  | 63.976 | 61.907 | 1.00 18.87 | N |
| ATOM | 3672 | N   | THR B | 47 | -10.672 | 57.484 | 60.374 | 1.00 19.12 | N |
| ATOM | 3673 | CA  | THR B | 47 | -11.156 | 56.108 | 60.468 | 1.00 18.34 | C |

| ATOM | 3674 | C   | THR | B | 47 | -10.553 | 55.264 | 61.586 | 1.00 | 19.40 | C |
| ATOM | 3675 | O   | THR | B | 47 | -11.274 | 54.667 | 62.406 | 1.00 | 20.59 | O |
| ATOM | 3676 | CB  | THR | B | 47 | -10.927 | 55.365 | 59.125 | 1.00 | 16.86 | C |
| ATOM | 3677 | OG1 | THR | B | 47 | -11.601 | 56.063 | 58.066 | 1.00 | 16.42 | O |
| ATOM | 3678 | CG2 | THR | B | 47 | -11.418 | 53.901 | 59.197 | 1.00 | 17.89 | C |
| ATOM | 3679 | N   | LEU | B | 48 | -9.233  | 55.189 | 61.606 | 1.00 | 17.39 | N |
| ATOM | 3680 | CA  | LEU | B | 48 | -8.605  | 54.377 | 62.592 | 1.00 | 17.47 | C |
| ATOM | 3681 | C   | LEU | B | 48 | -8.832  | 54.919 | 63.983 | 1.00 | 17.68 | C |
| ATOM | 3682 | O   | LEU | B | 48 | -9.051  | 54.131 | 64.901 | 1.00 | 19.32 | O |
| ATOM | 3683 | CB  | LEU | B | 48 | -7.109  | 54.213 | 62.285 | 1.00 | 17.87 | C |
| ATOM | 3684 | CG  | LEU | B | 48 | -6.900  | 53.452 | 60.977 | 1.00 | 17.88 | C |
| ATOM | 3685 | CD1 | LEU | B | 48 | -5.429  | 53.139 | 60.832 | 1.00 | 17.72 | C |
| ATOM | 3686 | CD2 | LEU | B | 49 | -7.704  | 52.148 | 60.957 | 1.00 | 18.58 | C |
| ATOM | 3687 | N   | ALA | B | 49 | -8.825  | 56.245 | 64.141 | 1.00 | 17.94 | N |
| ATOM | 3688 | CA  | ALA | B | 49 | -9.048  | 56.813 | 65.462 | 1.00 | 17.77 | C |
| ATOM | 3689 | C   | ALA | B | 49 | -10.483 | 56.500 | 65.924 | 1.00 | 19.00 | C |
| ATOM | 3690 | O   | ALA | B | 49 | -10.722 | 56.202 | 67.122 | 1.00 | 19.78 | O |
| ATOM | 3691 | CB  | ALA | B | 49 | -8.811  | 58.319 | 65.450 | 1.00 | 15.90 | C |
| ATOM | 3692 | N   | ARG | B | 50 | -11.427 | 56.543 | 64.983 | 1.00 | 21.26 | N |
| ATOM | 3693 | CA  | ARG | B | 50 | -12.834 | 56.256 | 65.326 | 1.00 | 20.85 | C |
| ATOM | 3694 | C   | ARG | B | 50 | -13.023 | 54.792 | 65.679 | 1.00 | 22.61 | C |
| ATOM | 3695 | O   | ARG | B | 50 | -13.512 | 54.437 | 66.759 | 1.00 | 21.90 | O |
| ATOM | 3696 | CB  | ARG | B | 50 | -13.768 | 56.592 | 64.161 | 1.00 | 22.00 | C |
| ATOM | 3697 | CG  | ARG | B | 50 | -15.269 | 56.416 | 64.532 | 1.00 | 22.30 | C |
| ATOM | 3698 | CD  | ARG | B | 50 | -16.200 | 56.786 | 63.362 | 1.00 | 21.47 | C |
| ATOM | 3699 | NE  | ARG | B | 50 | -15.881 | 58.090 | 62.808 | 1.00 | 22.98 | N |
| ATOM | 3700 | CZ  | ARG | B | 50 | -16.147 | 59.245 | 63.415 | 1.00 | 25.68 | C |
| ATOM | 3701 | NH1 | ARG | B | 50 | -16.746 | 59.241 | 64.599 | 1.00 | 24.89 | N |
| ATOM | 3702 | NH2 | ARG | B | 50 | -15.807 | 60.399 | 62.841 | 1.00 | 25.26 | N |
| ATOM | 3703 | N   | ARG | B | 51 | -12.659 | 53.922 | 64.739 | 1.00 | 23.17 | N |
| ATOM | 3704 | CA  | ARG | B | 51 | -12.782 | 52.505 | 64.980 | 1.00 | 20.51 | C |
| ATOM | 3705 | C   | ARG | B | 51 | -12.054 | 52.100 | 66.267 | 1.00 | 21.44 | C |
| ATOM | 3706 | O   | ARG | B | 51 | -12.619 | 51.405 | 67.128 | 1.00 | 19.59 | O |
| ATOM | 3707 | CB  | ARG | B | 51 | -12.226 | 51.733 | 63.789 | 1.00 | 19.70 | C |
| ATOM | 3708 | CG  | ARG | B | 51 | -12.469 | 50.213 | 63.817 | 1.00 | 24.02 | C |
| ATOM | 3709 | CD  | ARG | B | 51 | -11.993 | 49.626 | 62.482 | 1.00 | 26.45 | C |
| ATOM | 3710 | NE  | ARG | B | 51 | -12.445 | 48.255 | 62.258 | 1.00 | 26.23 | N |
| ATOM | 3711 | CZ  | ARG | B | 51 | -11.890 | 47.183 | 62.801 | 1.00 | 28.54 | C |
| ATOM | 3712 | NH1 | ARG | B | 51 | -10.849 | 47.293 | 63.624 | 1.00 | 27.62 | N |
| ATOM | 3713 | NH2 | ARG | B | 51 | -12.355 | 45.981 | 62.489 | 1.00 | 29.33 | N |
| ATOM | 3714 | N   | GLY | B | 52 | -10.803 | 52.553 | 66.412 | 1.00 | 19.12 | N |
| ATOM | 3715 | CA  | GLY | B | 52 | -10.026 | 52.167 | 67.581 | 1.00 | 20.10 | C |
| ATOM | 3716 | C   | GLY | B | 52 | -10.678 | 52.554 | 68.906 | 1.00 | 19.18 | C |
| ATOM | 3717 | O   | GLY | B | 52 | -10.720 | 51.741 | 69.853 | 1.00 | 19.09 | O |
| ATOM | 3718 | N   | ALA | B | 53 | -11.151 | 53.797 | 68.974 | 1.00 | 19.57 | N |
| ATOM | 3719 | CA  | ALA | B | 53 | -11.789 | 54.330 | 70.183 | 1.00 | 21.41 | C |
| ATOM | 3720 | C   | ALA | B | 53 | -13.063 | 53.550 | 70.505 | 1.00 | 21.04 | C |
| ATOM | 3721 | O   | ALA | B | 53 | -13.359 | 53.271 | 71.667 | 1.00 | 20.49 | O |
| ATOM | 3722 | CB  | ALA | B | 53 | -12.131 | 55.811 | 69.994 | 1.00 | 19.60 | C |
| ATOM | 3723 | N   | GLU | B | 54 | -13.815 | 53.217 | 69.462 | 1.00 | 23.20 | N |
| ATOM | 3724 | CA  | GLU | B | 54 | -15.041 | 52.467 | 69.676 | 1.00 | 23.14 | C |
| ATOM | 3725 | C   | GLU | B | 54 | -14.702 | 51.065 | 70.167 | 1.00 | 24.20 | C |
| ATOM | 3726 | O   | GLU | B | 54 | -15.292 | 50.608 | 71.156 | 1.00 | 25.88 | O |
| ATOM | 3727 | CB  | GLU | B | 54 | -15.873 | 52.445 | 68.385 | 1.00 | 25.51 | C |
| ATOM | 3728 | CG  | GLU | B | 54 | -16.423 | 53.818 | 67.968 | 1.00 | 27.23 | C |
| ATOM | 3729 | CD  | GLU | B | 54 | -17.426 | 53.757 | 66.801 | 1.00 | 30.67 | C |
| ATOM | 3730 | OE1 | GLU | B | 54 | -17.696 | 52.653 | 66.259 | 1.00 | 32.90 | O |
| ATOM | 3731 | OE2 | GLU | B | 54 | -17.956 | 54.821 | 66.420 | 1.00 | 32.88 | O |
| ATOM | 3732 | N   | VAL | B | 55 | -13.754 | 50.383 | 69.520 | 1.00 | 21.98 | N |
| ATOM | 3733 | CA  | VAL | B | 55 | -13.379 | 49.034 | 69.934 | 1.00 | 23.69 | C |
| ATOM | 3734 | C   | VAL | B | 55 | -12.848 | 49.014 | 71.366 | 1.00 | 23.99 | C |
| ATOM | 3735 | O   | VAL | B | 55 | -13.262 | 48.178 | 72.180 | 1.00 | 24.46 | O |
| ATOM | 3736 | CB  | VAL | B | 55 | -12.324 | 48.415 | 68.973 | 1.00 | 22.87 | C |
| ATOM | 3737 | CG1 | VAL | B | 55 | -11.785 | 47.088 | 69.498 | 1.00 | 23.48 | C |
| ATOM | 3738 | CG2 | VAL | B | 55 | -12.943 | 48.231 | 67.616 | 1.00 | 24.97 | C |
| ATOM | 3739 | N   | LEU | B | 56 | -11.934 | 49.929 | 71.683 | 1.00 | 22.80 | N |
| ATOM | 3740 | CA  | LEU | B | 56 | -11.356 | 50.000 | 73.025 | 1.00 | 22.96 | C |
| ATOM | 3741 | C   | LEU | B | 56 | -12.467 | 50.071 | 74.093 | 1.00 | 24.70 | C |
| ATOM | 3742 | O   | LEU | B | 56 | -12.494 | 49.280 | 75.050 | 1.00 | 25.02 | O |
| ATOM | 3743 | CB  | LEU | B | 56 | -10.440 | 51.233 | 73.136 | 1.00 | 21.05 | C |
| ATOM | 3744 | CG  | LEU | B | 56 | -9.726  | 51.398 | 74.495 | 1.00 | 20.89 | C |
| ATOM | 3745 | CD1 | LEU | B | 56 | -8.947  | 50.145 | 74.780 | 1.00 | 22.41 | C |
| ATOM | 3746 | CD2 | LEU | B | 56 | -8.802  | 52.659 | 74.490 | 1.00 | 21.55 | C |
| ATOM | 3747 | N   | TRP | B | 57 | -13.386 | 51.002 | 73.900 | 1.00 | 24.28 | N |
| ATOM | 3748 | CA  | TRP | B | 57 | -14.500 | 51.202 | 74.824 | 1.00 | 27.00 | C |
| ATOM | 3749 | C   | TRP | B | 57 | -15.320 | 49.910 | 74.986 | 1.00 | 27.55 | C |
| ATOM | 3750 | O   | TRP | B | 57 | -15.575 | 49.483 | 76.117 | 1.00 | 26.73 | O |
| ATOM | 3751 | CB  | TRP | B | 57 | -15.374 | 52.370 | 74.322 | 1.00 | 27.06 | C |
| ATOM | 3752 | CG  | TRP | B | 57 | -16.432 | 52.840 | 75.284 | 1.00 | 30.14 | C |
| ATOM | 3753 | CD1 | TRP | B | 57 | -17.777 | 52.621 | 75.184 | 1.00 | 30.61 | C |

| ATOM | 3754 | CD2 | TRP | B | 57 | -16.239 | 53.598 | 76.490 | 1.00 | 30.35 | C |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 3755 | NE1 | TRP | B | 57 | -18.432 | 53.196 | 76.247 | 1.00 | 31.01 | N |
| ATOM | 3756 | CE2 | TRP | B | 57 | -17.513 | 53.801 | 77.066 | 1.00 | 31.69 | C |
| ATOM | 3757 | CE3 | TRP | B | 57 | -15.112 | 54.124 | 77.143 | 1.00 | 32.44 | C |
| ATOM | 3758 | CZ2 | TRP | B | 57 | -17.696 | 54.506 | 78.266 | 1.00 | 32.80 | C |
| ATOM | 3759 | CZ3 | TRP | B | 57 | -15.293 | 54.828 | 78.340 | 1.00 | 31.26 | C |
| ATOM | 3760 | CH2 | TRP | B | 57 | -16.578 | 55.009 | 78.885 | 1.00 | 33.23 | C |
| ATOM | 3761 | N   | GLU | B | 58 | -15.730 | 49.285 | 73.879 | 1.00 | 28.09 | N |
| ATOM | 3762 | CA  | GLU | B | 58 | -16.492 | 48.034 | 73.997 | 1.00 | 30.89 | C |
| ATOM | 3763 | C   | GLU | B | 58 | -15.664 | 46.993 | 74.788 | 1.00 | 31.24 | C |
| ATOM | 3764 | O   | GLU | B | 58 | -16.175 | 46.345 | 75.713 | 1.00 | 30.12 | O |
| ATOM | 3765 | CB  | GLU | B | 58 | -16.826 | 47.434 | 72.610 | 1.00 | 34.33 | C |
| ATOM | 3766 | CG  | GLU | B | 58 | -17.516 | 48.358 | 71.604 | 1.00 | 40.42 | C |
| ATOM | 3767 | CD  | GLU | B | 58 | -17.562 | 47.748 | 70.186 | 1.00 | 44.07 | C |
| ATOM | 3768 | OE1 | GLU | B | 58 | -17.917 | 46.550 | 70.064 | 1.00 | 46.08 | O |
| ATOM | 3769 | OE2 | GLU | B | 58 | -17.250 | 48.461 | 69.189 | 1.00 | 46.26 | O |
| ATOM | 3770 | N   | GLN | B | 59 | -14.388 | 46.830 | 74.439 | 1.00 | 29.04 | N |
| ATOM | 3771 | CA  | GLN | B | 59 | -13.568 | 45.850 | 75.141 | 1.00 | 29.83 | C |
| ATOM | 3772 | C   | GLN | B | 59 | -13.514 | 46.167 | 76.632 | 1.00 | 30.08 | C |
| ATOM | 3773 | O   | GLN | B | 59 | -13.609 | 45.266 | 77.465 | 1.00 | 29.37 | O |
| ATOM | 3774 | CB  | GLN | B | 59 | -12.150 | 45.774 | 74.537 | 1.00 | 30.55 | C |
| ATOM | 3775 | CG  | GLN | B | 59 | -12.124 | 45.186 | 73.123 | 1.00 | 31.59 | C |
| ATOM | 3776 | CD  | GLN | B | 59 | -10.716 | 45.123 | 72.514 | 1.00 | 31.68 | C |
| ATOM | 3777 | OE1 | GLN | B | 59 | -9.794  | 45.821 | 72.949 | 1.00 | 33.07 | O |
| ATOM | 3778 | NE2 | GLN | B | 59 | -10.563 | 44.311 | 71.491 | 1.00 | 30.75 | N |
| ATOM | 3779 | N   | LEU | B | 60 | -13.385 | 47.447 | 76.977 | 1.00 | 30.92 | N |
| ATOM | 3780 | CA  | LEU | B | 60 | -13.325 | 47.835 | 78.386 | 1.00 | 31.21 | C |
| ATOM | 3781 | C   | LEU | B | 60 | -14.580 | 47.399 | 79.186 | 1.00 | 33.05 | C |
| ATOM | 3782 | O   | LEU | B | 60 | -14.512 | 47.157 | 80.407 | 1.00 | 32.78 | O |
| ATOM | 3783 | CB  | LEU | B | 60 | -13.128 | 49.344 | 78.485 | 1.00 | 29.51 | C |
| ATOM | 3784 | CG  | LEU | B | 60 | -11.671 | 49.770 | 78.225 | 1.00 | 26.26 | C |
| ATOM | 3785 | CD1 | LEU | B | 60 | -11.600 | 51.263 | 78.099 | 1.00 | 24.88 | C |
| ATOM | 3786 | CD2 | LEU | B | 60 | -10.794 | 49.284 | 79.346 | 1.00 | 26.08 | C |
| ATOM | 3787 | N   | HIS | B | 61 | -15.701 | 47.271 | 78.482 | 1.00 | 34.66 | N |
| ATOM | 3788 | CA  | HIS | B | 61 | -16.965 | 46.877 | 79.097 | 1.00 | 37.14 | C |
| ATOM | 3789 | C   | HIS | B | 61 | -17.292 | 45.392 | 78.901 | 1.00 | 37.68 | C |
| ATOM | 3790 | O   | HIS | B | 61 | -18.009 | 44.804 | 79.719 | 1.00 | 39.17 | O |
| ATOM | 3791 | CB  | HIS | B | 61 | -18.101 | 47.738 | 78.525 | 1.00 | 38.48 | C |
| ATOM | 3792 | CG  | HIS | B | 61 | -18.033 | 49.182 | 78.924 | 1.00 | 39.71 | C |
| ATOM | 3793 | ND1 | HIS | B | 61 | -18.650 | 49.673 | 80.055 | 1.00 | 40.34 | N |
| ATOM | 3794 | CD2 | HIS | B | 61 | -17.447 | 50.249 | 78.327 | 1.00 | 40.17 | C |
| ATOM | 3795 | CE1 | HIS | B | 61 | -18.455 | 50.980 | 80.135 | 1.00 | 38.89 | C |
| ATOM | 3796 | NE2 | HIS | B | 61 | -17.729 | 51.355 | 79.099 | 1.00 | 40.43 | N |
| ATOM | 3797 | N   | ASP | B | 62 | -16.747 | 44.777 | 77.849 | 1.00 | 37.02 | N |
| ATOM | 3798 | CA  | ASP | B | 62 | -17.007 | 43.365 | 77.538 | 1.00 | 36.68 | C |
| ATOM | 3799 | C   | ASP | B | 62 | -16.017 | 42.362 | 78.116 | 1.00 | 37.27 | C |
| ATOM | 3800 | O   | ASP | B | 62 | -16.358 | 41.189 | 78.336 | 1.00 | 37.96 | O |
| ATOM | 3801 | CB  | ASP | B | 62 | -17.025 | 43.143 | 76.026 | 1.00 | 37.61 | C |
| ATOM | 3802 | CG  | ASP | B | 62 | -18.160 | 43.856 | 75.333 | 1.00 | 38.38 | C |
| ATOM | 3803 | OD1 | ASP | B | 62 | -18.992 | 44.503 | 76.013 | 1.00 | 41.57 | O |
| ATOM | 3804 | OD2 | ASP | B | 62 | -18.218 | 43.762 | 74.088 | 1.00 | 38.49 | O |
| ATOM | 3805 | N   | LEU | B | 63 | -14.783 | 42.785 | 78.331 | 1.00 | 35.12 | N |
| ATOM | 3806 | CA  | LEU | B | 63 | -13.782 | 41.875 | 78.857 | 1.00 | 34.50 | C |
| ATOM | 3807 | C   | LEU | B | 63 | -13.645 | 42.005 | 80.368 | 1.00 | 33.54 | C |
| ATOM | 3808 | O   | LEU | B | 63 | -14.101 | 42.980 | 80.944 | 1.00 | 34.00 | O |
| ATOM | 3809 | CB  | LEU | B | 63 | -12.443 | 42.139 | 78.162 | 1.00 | 34.01 | C |
| ATOM | 3810 | CG  | LEU | B | 63 | -12.544 | 42.028 | 76.642 | 1.00 | 33.13 | C |
| ATOM | 3811 | CD1 | LEU | B | 63 | -11.203 | 42.296 | 76.004 | 1.00 | 32.42 | C |
| ATOM | 3812 | CD2 | LEU | B | 63 | -13.027 | 40.616 | 76.281 | 1.00 | 35.09 | C |
| ATOM | 3813 | N   | GLU | B | 64 | -13.045 | 41.000 | 81.005 | 1.00 | 35.35 | N |
| ATOM | 3814 | CA  | GLU | B | 64 | -12.837 | 41.022 | 82.458 | 1.00 | 35.77 | C |
| ATOM | 3815 | C   | GLU | B | 64 | -11.902 | 42.215 | 82.682 | 1.00 | 34.97 | C |
| ATOM | 3816 | O   | GLU | B | 64 | -11.988 | 42.918 | 83.682 | 1.00 | 35.42 | O |
| ATOM | 3817 | CB  | GLU | B | 64 | -12.172 | 39.720 | 82.907 | 1.00 | 38.06 | C |
| ATOM | 3818 | CG  | GLU | B | 64 | -12.497 | 39.318 | 84.345 | 1.00 | 42.19 | C |
| ATOM | 3819 | CD  | GLU | B | 64 | -11.845 | 37.998 | 84.731 | 1.00 | 44.69 | C |
| ATOM | 3820 | OE1 | GLU | B | 64 | -11.973 | 37.013 | 83.966 | 1.00 | 46.47 | O |
| ATOM | 3821 | OE2 | GLU | B | 64 | -11.209 | 37.943 | 85.808 | 1.00 | 46.57 | O |
| ATOM | 3822 | N   | TRP | B | 65 | -11.012 | 42.428 | 81.715 | 1.00 | 32.37 | N |
| ATOM | 3823 | CA  | TRP | B | 65 | -10.098 | 43.567 | 81.706 | 1.00 | 29.36 | C |
| ATOM | 3824 | C   | TRP | B | 65 | -9.244  | 43.519 | 80.434 | 1.00 | 29.82 | C |
| ATOM | 3825 | O   | TRP | B | 65 | -9.121  | 42.465 | 79.788 | 1.00 | 28.47 | O |
| ATOM | 3826 | CB  | TRP | B | 65 | -9.232  | 43.602 | 82.966 | 1.00 | 28.87 | C |
| ATOM | 3827 | CG  | TRP | B | 65 | -7.992  | 42.769 | 82.957 | 1.00 | 28.30 | C |
| ATOM | 3828 | CD1 | TRP | B | 65 | -6.739  | 43.176 | 82.589 | 1.00 | 28.52 | C |
| ATOM | 3829 | CD2 | TRP | B | 65 | -7.855  | 41.416 | 83.410 | 1.00 | 29.47 | C |
| ATOM | 3830 | NE1 | TRP | B | 65 | -5.835  | 42.170 | 82.792 | 1.00 | 28.10 | N |
| ATOM | 3831 | CE2 | TRP | B | 65 | -6.492  | 41.076 | 83.292 | 1.00 | 28.99 | C |
| ATOM | 3832 | CE3 | TRP | B | 65 | -8.750  | 40.462 | 83.909 | 1.00 | 28.49 | C |
| ATOM | 3833 | CZ2 | TRP | B | 65 | -5.999  | 39.825 | 83.653 | 1.00 | 29.46 | C |

| ATOM | 3834 | CZ3 | TRP | B | 65 | -8.263 | 39.226 | 84.268 | 1.00 | 30.51 | C |
|------|------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 3835 | CH2 | TRP | B | 65 | -6.898 | 38.913 | 84.140 | 1.00 | 31.40 | C |
| ATOM | 3836 | N | VAL | B | 66 | -8.670 | 44.671 | 80.073 | 1.00 | 26.60 | N |
| ATOM | 3837 | CA | VAL | B | 66 | -7.843 | 44.798 | 78.877 | 1.00 | 26.41 | C |
| ATOM | 3838 | C | VAL | B | 66 | -6.404 | 44.985 | 79.290 | 1.00 | 26.03 | C |
| ATOM | 3839 | O | VAL | B | 66 | -6.110 | 45.881 | 80.075 | 1.00 | 26.85 | O |
| ATOM | 3840 | CB | VAL | B | 66 | -8.245 | 46.037 | 78.079 | 1.00 | 24.19 | C |
| ATOM | 3841 | CG1 | VAL | B | 66 | -7.389 | 46.134 | 76.814 | 1.00 | 22.80 | C |
| ATOM | 3842 | CG2 | VAL | B | 66 | -9.719 | 45.929 | 77.700 | 1.00 | 24.86 | C |
| ATOM | 3843 | N | ASN | B | 67 | -5.514 | 44.121 | 78.841 | 1.00 | 25.18 | N |
| ATOM | 3844 | CA | ASN | B | 67 | -4.141 | 44.364 | 79.187 | 1.00 | 24.73 | C |
| ATOM | 3845 | C | ASN | B | 67 | -3.340 | 44.657 | 77.916 | 1.00 | 24.93 | C |
| ATOM | 3846 | O | ASN | B | 67 | -3.845 | 44.538 | 76.799 | 1.00 | 25.35 | O |
| ATOM | 3847 | CB | ASN | B | 67 | -3.519 | 43.249 | 80.021 | 1.00 | 25.75 | C |
| ATOM | 3848 | CG | ASN | B | 67 | -3.718 | 41.883 | 79.449 | 1.00 | 27.52 | C |
| ATOM | 3849 | OD1 | ASN | B | 67 | -4.215 | 41.708 | 78.339 | 1.00 | 31.40 | O |
| ATOM | 3850 | ND2 | ASN | B | 67 | -3.318 | 40.886 | 80.215 | 1.00 | 27.70 | N |
| ATOM | 3851 | N | ALA | B | 68 | -2.092 | 45.057 | 78.092 | 1.00 | 22.30 | N |
| ATOM | 3852 | CA | ALA | B | 68 | -1.291 | 45.423 | 76.937 | 1.00 | 20.91 | C |
| ATOM | 3853 | C | ALA | B | 68 | 0.153 | 45.485 | 77.377 | 1.00 | 19.81 | C |
| ATOM | 3854 | O | ALA | B | 68 | 0.443 | 45.472 | 78.576 | 1.00 | 18.52 | O |
| ATOM | 3855 | CB | ALA | B | 68 | -1.741 | 46.779 | 76.438 | 1.00 | 17.88 | C |
| ATOM | 3856 | N | LEU | B | 69 | 1.031 | 45.553 | 76.379 | 1.00 | 18.69 | N |
| ATOM | 3857 | CA | LEU | B | 69 | 2.469 | 45.629 | 76.578 | 1.00 | 18.30 | C |
| ATOM | 3858 | C | LEU | B | 69 | 2.927 | 46.838 | 75.786 | 1.00 | 18.91 | C |
| ATOM | 3859 | O | LEU | B | 69 | 2.342 | 47.152 | 74.743 | 1.00 | 17.17 | O |
| ATOM | 3860 | CB | LEU | B | 69 | 3.138 | 44.388 | 76.002 | 1.00 | 17.32 | C |
| ATOM | 3861 | CG | LEU | B | 69 | 2.775 | 43.060 | 76.684 | 1.00 | 19.50 | C |
| ATOM | 3862 | CD1 | LEU | B | 69 | 3.681 | 41.972 | 76.086 | 1.00 | 18.15 | C |
| ATOM | 3863 | CD2 | LEU | B | 69 | 3.009 | 43.174 | 78.185 | 1.00 | 18.52 | C |
| ATOM | 3864 | N | GLY | B | 70 | 3.958 | 47.524 | 76.260 | 1.00 | 17.89 | N |
| ATOM | 3865 | CA | GLY | B | 70 | 4.393 | 48.676 | 75.481 | 1.00 | 18.90 | C |
| ATOM | 3866 | C | GLY | B | 70 | 5.058 | 48.244 | 74.167 | 1.00 | 18.62 | C |
| ATOM | 3867 | O | GLY | B | 70 | 5.837 | 47.301 | 74.143 | 1.00 | 19.38 | O |
| ATOM | 3868 | N | ALA | B | 71 | 4.743 | 48.930 | 73.072 | 1.00 | 17.74 | N |
| ATOM | 3869 | CA | ALA | B | 71 | 5.343 | 48.671 | 71.769 | 1.00 | 15.98 | C |
| ATOM | 3870 | C | ALA | B | 71 | 6.021 | 49.956 | 71.258 | 1.00 | 16.92 | C |
| ATOM | 3871 | O | ALA | B | 71 | 5.419 | 51.041 | 71.283 | 1.00 | 16.56 | O |
| ATOM | 3872 | CB | ALA | B | 71 | 4.283 | 48.268 | 70.791 | 1.00 | 16.39 | C |
| ATOM | 3873 | N | LEU | B | 72 | 7.271 | 49.839 | 70.830 | 1.00 | 15.50 | N |
| ATOM | 3874 | CA | LEU | B | 72 | 7.988 | 50.984 | 70.295 | 1.00 | 14.95 | C |
| ATOM | 3875 | C | LEU | B | 72 | 8.274 | 50.804 | 68.805 | 1.00 | 15.82 | C |
| ATOM | 3876 | O | LEU | B | 72 | 8.851 | 51.695 | 68.184 | 1.00 | 14.57 | O |
| ATOM | 3877 | CB | LEU | B | 72 | 9.281 | 51.215 | 71.057 | 1.00 | 13.57 | C |
| ATOM | 3878 | CG | LEU | B | 72 | 10.274 | 50.063 | 71.017 | 1.00 | 17.00 | C |
| ATOM | 3879 | CD1 | LEU | B | 72 | 11.582 | 50.590 | 70.407 | 1.00 | 18.13 | C |
| ATOM | 3880 | CD2 | LEU | B | 72 | 10.532 | 49.570 | 72.450 | 1.00 | 17.23 | C |
| ATOM | 3881 | N | THR | B | 73 | 7.926 | 49.644 | 68.226 | 1.00 | 13.50 | N |
| ATOM | 3882 | CA | THR | B | 73 | 8.080 | 49.474 | 66.766 | 1.00 | 14.39 | C |
| ATOM | 3883 | C | THR | B | 73 | 6.809 | 48.791 | 66.242 | 1.00 | 15.35 | C |
| ATOM | 3884 | O | THR | B | 73 | 6.083 | 48.173 | 67.023 | 1.00 | 15.68 | O |
| ATOM | 3885 | CB | THR | B | 73 | 9.264 | 48.579 | 66.305 | 1.00 | 13.94 | C |
| ATOM | 3886 | OG1 | THR | B | 73 | 8.916 | 47.207 | 66.465 | 1.00 | 16.29 | O |
| ATOM | 3887 | CG2 | THR | B | 73 | 10.544 | 48.898 | 67.057 | 1.00 | 15.13 | C |
| ATOM | 3888 | N | GLY | B | 74 | 6.539 | 48.910 | 64.945 | 1.00 | 13.98 | N |
| ATOM | 3889 | CA | GLY | B | 74 | 5.340 | 48.284 | 64.380 | 1.00 | 16.86 | C |
| ATOM | 3890 | C | GLY | B | 74 | 5.321 | 46.765 | 64.493 | 1.00 | 17.40 | C |
| ATOM | 3891 | O | GLY | B | 74 | 4.301 | 46.150 | 64.810 | 1.00 | 17.27 | O |
| ATOM | 3892 | N | ASN | B | 75 | 6.461 | 46.151 | 64.234 | 1.00 | 15.16 | N |
| ATOM | 3893 | CA | ASN | B | 75 | 6.592 | 44.695 | 64.335 | 1.00 | 16.46 | C |
| ATOM | 3894 | C | ASN | B | 75 | 6.242 | 44.199 | 65.747 | 1.00 | 16.45 | C |
| ATOM | 3895 | O | ASN | B | 75 | 5.649 | 43.122 | 65.913 | 1.00 | 17.51 | O |
| ATOM | 3896 | CB | ASN | B | 75 | 8.022 | 44.289 | 63.984 | 1.00 | 16.27 | C |
| ATOM | 3897 | CG | ASN | B | 75 | 8.266 | 44.212 | 62.493 | 1.00 | 18.18 | C |
| ATOM | 3898 | OD1 | ASN | B | 75 | 7.484 | 44.718 | 61.680 | 1.00 | 20.94 | O |
| ATOM | 3899 | ND2 | ASN | B | 75 | 9.382 | 43.585 | 62.118 | 1.00 | 16.01 | N |
| ATOM | 3900 | N | MET | B | 76 | 6.619 | 44.960 | 66.771 | 1.00 | 17.70 | N |
| ATOM | 3901 | CA | MET | B | 76 | 6.293 | 44.580 | 68.155 | 1.00 | 18.55 | C |
| ATOM | 3902 | C | MET | B | 76 | 4.774 | 44.521 | 68.338 | 1.00 | 19.96 | C |
| ATOM | 3903 | O | MET | B | 76 | 4.238 | 43.600 | 68.938 | 1.00 | 19.24 | O |
| ATOM | 3904 | CB | MET | B | 76 | 6.836 | 45.606 | 69.168 | 1.00 | 19.44 | C |
| ATOM | 3905 | CG | MET | B | 76 | 8.264 | 45.442 | 69.533 | 1.00 | 18.09 | C |
| ATOM | 3906 | SD | MET | B | 76 | 8.743 | 46.510 | 70.929 | 1.00 | 17.81 | S |
| ATOM | 3907 | CE | MET | B | 76 | 10.521 | 46.264 | 70.815 | 1.00 | 17.35 | C |
| ATOM | 3908 | N | ALA | B | 77 | 4.080 | 45.518 | 67.821 | 1.00 | 17.66 | N |
| ATOM | 3909 | CA | ALA | B | 77 | 2.633 | 45.553 | 67.946 | 1.00 | 18.58 | C |
| ATOM | 3910 | C | ALA | B | 77 | 2.034 | 44.367 | 67.192 | 1.00 | 17.52 | C |
| ATOM | 3911 | O | ALA | B | 77 | 1.083 | 43.761 | 67.658 | 1.00 | 18.88 | O |
| ATOM | 3912 | CB | ALA | B | 77 | 2.093 | 46.860 | 67.390 | 1.00 | 18.13 | C |
| ATOM | 3913 | N | VAL | B | 78 | 2.624 | 44.016 | 66.051 | 1.00 | 17.78 | N |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 3914 | CA | VAL | B | 78 | 2.110 | 42.899 | 65.254 | 1.00 | 17.14 | C |
| ATOM | 3915 | C | VAL | B | 78 | 2.246 | 41.611 | 66.078 | 1.00 | 18.61 | C |
| ATOM | 3916 | O | VAL | B | 78 | 1.284 | 40.859 | 66.178 | 1.00 | 17.93 | O |
| ATOM | 3917 | CB | VAL | B | 78 | 2.865 | 42.755 | 63.913 | 1.00 | 14.85 | C |
| ATOM | 3918 | CG1 | VAL | B | 78 | 2.537 | 41.443 | 63.223 | 1.00 | 15.32 | C |
| ATOM | 3919 | CG2 | VAL | B | 78 | 2.480 | 43.912 | 62.990 | 1.00 | 16.00 | C |
| ATOM | 3920 | N | GLN | B | 79 | 3.417 | 41.367 | 66.673 | 1.00 | 19.97 | N |
| ATOM | 3921 | CA | GLN | B | 79 | 3.610 | 40.157 | 67.488 | 1.00 | 20.66 | C |
| ATOM | 3922 | C | GLN | B | 79 | 2.665 | 40.088 | 68.696 | 1.00 | 22.81 | C |
| ATOM | 3923 | O | GLN | B | 79 | 2.216 | 38.994 | 69.067 | 1.00 | 22.17 | O |
| ATOM | 3924 | CB | GLN | B | 79 | 5.063 | 40.040 | 67.967 | 1.00 | 19.32 | C |
| ATOM | 3925 | CG | GLN | B | 79 | 6.057 | 39.746 | 66.859 | 1.00 | 17.92 | C |
| ATOM | 3926 | CD | GLN | B | 79 | 5.594 | 38.645 | 65.957 | 1.00 | 22.02 | C |
| ATOM | 3927 | OE1 | GLN | B | 79 | 4.900 | 37.716 | 66.401 | 1.00 | 24.53 | O |
| ATOM | 3928 | NE2 | GLN | B | 79 | 5.981 | 38.719 | 64.677 | 1.00 | 20.38 | N |
| ATOM | 3929 | N | GLN | B | 80 | 2.357 | 41.243 | 69.297 | 1.00 | 21.57 | N |
| ATOM | 3930 | CA | GLN | B | 80 | 1.450 | 41.325 | 70.448 | 1.00 | 21.45 | C |
| ATOM | 3931 | C | GLN | B | 80 | 0.019 | 40.933 | 70.014 | 1.00 | 23.59 | C |
| ATOM | 3932 | O | GLN | B | 80 | -0.713 | 40.237 | 70.738 | 1.00 | 22.57 | O |
| ATOM | 3933 | CB | GLN | B | 80 | 1.462 | 42.763 | 71.045 | 1.00 | 18.16 | C |
| ATOM | 3934 | CG | GLN | B | 80 | 2.845 | 43.174 | 71.525 | 1.00 | 15.85 | C |
| ATOM | 3935 | CD | GLN | B | 80 | 2.944 | 44.638 | 71.978 | 1.00 | 15.51 | C |
| ATOM | 3936 | OE1 | GLN | B | 80 | 2.029 | 45.444 | 71.793 | 1.00 | 13.55 | O |
| ATOM | 3937 | NE2 | GLN | B | 80 | 4.083 | 44.975 | 72.577 | 1.00 | 16.16 | N |
| ATOM | 3938 | N | VAL | B | 81 | -0.382 | 41.362 | 68.827 | 1.00 | 22.88 | N |
| ATOM | 3939 | CA | VAL | B | 81 | -1.712 | 40.997 | 68.360 | 1.00 | 23.58 | C |
| ATOM | 3940 | C | VAL | B | 81 | -1.731 | 39.534 | 67.892 | 1.00 | 25.94 | C |
| ATOM | 3941 | O | VAL | B | 81 | -2.744 | 38.825 | 68.105 | 1.00 | 26.30 | O |
| ATOM | 3942 | CB | VAL | B | 81 | -2.214 | 41.947 | 67.242 | 1.00 | 22.98 | C |
| ATOM | 3943 | CG1 | VAL | B | 81 | -3.569 | 41.482 | 66.702 | 1.00 | 24.11 | C |
| ATOM | 3944 | CG2 | VAL | B | 81 | -2.367 | 43.336 | 67.817 | 1.00 | 21.35 | C |
| ATOM | 3945 | N | ARG | B | 82 | -0.642 | 39.079 | 67.274 | 1.00 | 24.11 | N |
| ATOM | 3946 | CA | ARG | B | 82 | -0.559 | 37.681 | 66.827 | 1.00 | 26.14 | C |
| ATOM | 3947 | C | ARG | B | 82 | -0.638 | 36.760 | 68.056 | 1.00 | 27.10 | C |
| ATOM | 3948 | O | ARG | B | 82 | -1.231 | 35.683 | 67.997 | 1.00 | 26.49 | O |
| ATOM | 3949 | CB | ARG | B | 82 | 0.768 | 37.396 | 66.099 | 1.00 | 27.36 | C |
| ATOM | 3950 | CG | ARG | B | 82 | 0.982 | 35.923 | 65.726 | 1.00 | 27.62 | C |
| ATOM | 3951 | CD | ARG | B | 82 | 0.087 | 35.511 | 64.574 | 1.00 | 28.08 | C |
| ATOM | 3952 | NE | ARG | B | 82 | 0.607 | 35.997 | 63.297 | 1.00 | 28.62 | N |
| ATOM | 3953 | CZ | ARG | B | 82 | 0.069 | 35.721 | 62.110 | 1.00 | 29.69 | C |
| ATOM | 3954 | NH1 | ARG | B | 82 | -1.019 | 34.963 | 62.045 | 1.00 | 30.10 | N |
| ATOM | 3955 | NH2 | ARG | B | 82 | 0.629 | 36.187 | 60.990 | 1.00 | 28.75 | N |
| ATOM | 3956 | N | ALA | B | 83 | 0.000 | 37.156 | 69.158 | 1.00 | 25.21 | N |
| ATOM | 3957 | CA | ALA | B | 83 | -0.034 | 36.345 | 70.383 | 1.00 | 25.12 | C |
| ATOM | 3958 | C | ALA | B | 83 | -1.368 | 36.399 | 71.111 | 1.00 | 24.66 | C |
| ATOM | 3959 | O | ALA | B | 83 | -1.547 | 35.759 | 72.145 | 1.00 | 25.89 | O |
| ATOM | 3960 | CB | ALA | B | 83 | 1.047 | 36.758 | 71.298 | 1.00 | 24.32 | C |
| ATOM | 3961 | N | GLY | B | 84 | -2.296 | 37.195 | 70.612 | 1.00 | 24.40 | N |
| ATOM | 3962 | CA | GLY | B | 84 | -3.598 | 37.245 | 71.237 | 1.00 | 24.30 | C |
| ATOM | 3963 | C | GLY | B | 84 | -3.991 | 38.484 | 72.023 | 1.00 | 26.39 | C |
| ATOM | 3964 | O | GLY | B | 84 | -5.132 | 38.586 | 72.446 | 1.00 | 24.88 | O |
| ATOM | 3965 | N | LEU | B | 85 | -3.082 | 39.442 | 72.216 | 1.00 | 24.02 | N |
| ATOM | 3966 | CA | LEU | B | 85 | -3.448 | 40.620 | 72.983 | 1.00 | 23.63 | C |
| ATOM | 3967 | C | LEU | B | 85 | -4.450 | 41.461 | 72.208 | 1.00 | 21.86 | C |
| ATOM | 3968 | O | LEU | B | 85 | -4.519 | 41.399 | 70.980 | 1.00 | 25.14 | O |
| ATOM | 3969 | CB | LEU | B | 85 | -2.179 | 41.414 | 73.363 | 1.00 | 21.67 | C |
| ATOM | 3970 | CG | LEU | B | 85 | -1.178 | 40.579 | 74.176 | 1.00 | 22.23 | C |
| ATOM | 3971 | CD1 | LEU | B | 85 | 0.084 | 41.365 | 74.457 | 1.00 | 20.67 | C |
| ATOM | 3972 | CD2 | LEU | B | 85 | -1.837 | 40.141 | 75.481 | 1.00 | 23.28 | C |
| ATOM | 3973 | N | LYS | B | 86 | -5.236 | 42.255 | 72.900 | 1.00 | 22.34 | N |
| ATOM | 3974 | CA | LYS | B | 86 | -6.238 | 43.030 | 72.199 | 1.00 | 23.47 | C |
| ATOM | 3975 | C | LYS | B | 86 | -6.157 | 44.553 | 72.294 | 1.00 | 24.00 | C |
| ATOM | 3976 | O | LYS | B | 86 | -7.118 | 45.268 | 71.965 | 1.00 | 23.33 | O |
| ATOM | 3977 | CB | LYS | B | 86 | -7.626 | 42.527 | 72.617 | 1.00 | 29.28 | C |
| ATOM | 3978 | CG | LYS | B | 86 | -7.878 | 41.093 | 72.132 | 1.00 | 30.69 | C |
| ATOM | 3979 | CD | LYS | B | 86 | -9.287 | 40.654 | 72.456 | 1.00 | 33.69 | C |
| ATOM | 3980 | CE | LYS | B | 86 | -9.541 | 39.218 | 71.998 | 1.00 | 34.61 | C |
| ATOM | 3981 | NZ | LYS | B | 86 | -10.922 | 38.812 | 72.403 | 1.00 | 36.06 | N |
| ATOM | 3982 | N | ALA | B | 87 | -5.008 | 45.037 | 72.754 | 1.00 | 22.03 | N |
| ATOM | 3983 | CA | ALA | B | 87 | -4.743 | 46.469 | 72.840 | 1.00 | 21.78 | C |
| ATOM | 3984 | C | ALA | B | 87 | -3.249 | 46.653 | 72.793 | 1.00 | 20.45 | C |
| ATOM | 3985 | O | ALA | B | 87 | -2.480 | 45.731 | 73.128 | 1.00 | 19.75 | O |
| ATOM | 3986 | CB | ALA | B | 87 | -5.301 | 47.066 | 74.140 | 1.00 | 22.14 | C |
| ATOM | 3987 | N | ILE | B | 88 | -2.835 | 47.846 | 72.365 | 1.00 | 19.51 | N |
| ATOM | 3988 | CA | ILE | B | 88 | -1.427 | 48.160 | 72.297 | 1.00 | 18.02 | C |
| ATOM | 3989 | C | ILE | B | 88 | -1.197 | 49.369 | 73.187 | 1.00 | 17.95 | C |
| ATOM | 3990 | O | ILE | B | 88 | -2.009 | 50.286 | 73.192 | 1.00 | 16.79 | O |
| ATOM | 3991 | CB | ILE | B | 88 | -1.005 | 48.510 | 70.829 | 1.00 | 19.45 | C |
| ATOM | 3992 | CG1 | ILE | B | 88 | -1.352 | 47.318 | 69.902 | 1.00 | 20.29 | C |
| ATOM | 3993 | CG2 | ILE | B | 88 | 0.479 | 48.848 | 70.773 | 1.00 | 17.13 | C |

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ATOM   3994  CD1 ILE B  88    -0.747  47.444  68.561  1.00 27.83       C
ATOM   3995  N   TYR B  89    -0.115  49.358  73.959  1.00 17.67       N
ATOM   3996  CA  TYR B  89     0.212  50.513  74.805  1.00 17.69       C
ATOM   3997  C   TYR B  89     1.439  51.171  74.174  1.00 18.24       C
ATOM   3998  O   TYR B  89     2.392  50.484  73.855  1.00 18.75       O
ATOM   3999  CB  TYR B  89     0.551  50.124  76.260  1.00 15.93       C
ATOM   4000  CG  TYR B  89     0.979  51.335  77.084  1.00 18.34       C
ATOM   4001  CD1 TYR B  89     0.078  52.349  77.389  1.00 15.52       C
ATOM   4002  CD2 TYR B  89     2.300  51.488  77.494  1.00 17.09       C
ATOM   4003  CE1 TYR B  89     0.486  53.493  78.081  1.00 19.81       C
ATOM   4004  CE2 TYR B  89     2.719  52.622  78.186  1.00 17.45       C
ATOM   4005  CZ  TYR B  89     1.812  53.617  78.470  1.00 18.99       C
ATOM   4006  OH  TYR B  89     2.227  54.737  79.115  1.00 17.37       O
ATOM   4007  N   LEU B  90     1.412  52.495  74.010  1.00 17.34       N
ATOM   4008  CA  LEU B  90     2.546  53.180  73.400  1.00 18.21       C
ATOM   4009  C   LEU B  90     3.127  54.088  74.479  1.00 17.35       C
ATOM   4010  O   LEU B  90     2.567  55.116  74.791  1.00 17.92       O
ATOM   4011  CB  LEU B  90     2.062  53.943  72.184  1.00 19.31       C
ATOM   4012  CG  LEU B  90     2.842  54.962  71.368  1.00 21.14       C
ATOM   4013  CD1 LEU B  90     4.287  54.887  71.660  1.00 17.35       C
ATOM   4014  CD2 LEU B  90     2.514  54.811  69.924  1.00 20.17       C
ATOM   4015  N   SER B  91     4.228  53.623  75.050  1.00 16.67       N
ATOM   4016  CA  SER B  91     4.985  54.249  76.133  1.00 17.91       C
ATOM   4017  C   SER B  91     5.793  55.415  75.627  1.00 16.15       C
ATOM   4018  O   SER B  91     6.511  55.251  74.654  1.00 14.04       O
ATOM   4019  CB  SER B  91     5.979  53.236  76.703  1.00 18.06       C
ATOM   4020  OG  SER B  91     6.821  53.854  77.658  1.00 18.52       O
ATOM   4021  N   GLY B  92     5.675  56.562  76.295  1.00 16.24       N
ATOM   4022  CA  GLY B  92     6.465  57.733  75.911  1.00 16.76       C
ATOM   4023  C   GLY B  92     7.883  57.514  76.406  1.00 16.27       C
ATOM   4024  O   GLY B  92     8.849  58.051  75.852  1.00 14.85       O
ATOM   4025  N   TRP B  93     8.003  56.729  77.473  1.00 14.59       N
ATOM   4026  CA  TRP B  93     9.304  56.386  78.038  1.00 14.43       C
ATOM   4027  C   TRP B  93    10.102  55.626  76.965  1.00 15.78       C
ATOM   4028  O   TRP B  93    11.288  55.884  76.759  1.00 12.97       O
ATOM   4029  CB  TRP B  93     9.142  55.451  79.278  1.00 15.75       C
ATOM   4030  CG  TRP B  93    10.432  55.150  80.054  1.00 15.61       C
ATOM   4031  CD1 TRP B  93    10.759  55.642  81.292  1.00 16.56       C
ATOM   4032  CD2 TRP B  93    11.562  54.305  79.655  1.00 16.22       C
ATOM   4033  NE1 TRP B  93    11.984  55.168  81.682  1.00 16.73       N
ATOM   4034  CE2 TRP B  93    12.507  54.357  80.708  1.00 15.55       C
ATOM   4035  CE3 TRP B  93    11.858  53.533  78.525  1.00 16.58       C
ATOM   4036  CZ2 TRP B  93    13.740  53.668  80.664  1.00 16.92       C
ATOM   4037  CZ3 TRP B  93    13.105  52.832  78.476  1.00 17.95       C
ATOM   4038  CH2 TRP B  93    14.019  52.916  79.545  1.00 16.51       C
ATOM   4039  N   GLN B  94     9.469  54.654  76.302  1.00 14.32       N
ATOM   4040  CA  GLN B  94    10.173  53.855  75.268  1.00 13.15       C
ATOM   4041  C   GLN B  94    10.551  54.736  74.049  1.00 12.46       C
ATOM   4042  O   GLN B  94    11.583  54.565  73.425  1.00 12.71       O
ATOM   4043  CB  GLN B  94     9.279  52.706  74.816  1.00 13.62       C
ATOM   4044  CG  GLN B  94     9.062  51.647  75.930  1.00 13.87       C
ATOM   4045  CD  GLN B  94     8.341  50.391  75.411  1.00 15.30       C
ATOM   4046  OE1 GLN B  94     7.521  50.472  74.490  1.00 17.93       O
ATOM   4047  NE2 GLN B  94     8.640  49.257  76.001  1.00 11.47       N
ATOM   4048  N   VAL B  95     9.689  55.687  73.739  1.00 11.09       N
ATOM   4049  CA  VAL B  95     9.911  56.594  72.631  1.00 10.71       C
ATOM   4050  C   VAL B  95    11.149  57.449  72.961  1.00 11.03       C
ATOM   4051  O   VAL B  95    12.023  57.608  72.127  1.00 11.89       O
ATOM   4052  CB  VAL B  95     8.644  57.445  72.406  1.00 12.56       C
ATOM   4053  CG1 VAL B  95     8.962  58.751  71.604  1.00 11.41       C
ATOM   4054  CG2 VAL B  95     7.658  56.574  71.605  1.00  9.65       C
ATOM   4055  N   ALA B  96    11.236  57.932  74.188  1.00 13.04       N
ATOM   4056  CA  ALA B  96    12.390  58.720  74.628  1.00 12.49       C
ATOM   4057  C   ALA B  96    13.648  57.855  74.536  1.00 13.58       C
ATOM   4058  O   ALA B  96    14.689  58.294  74.007  1.00 14.79       O
ATOM   4059  CB  ALA B  96    12.199  59.193  76.072  1.00  9.38       C
ATOM   4060  N   GLY B  97    13.581  56.634  75.075  1.00 12.04       N
ATOM   4061  CA  GLY B  97    14.777  55.787  75.037  1.00 14.28       C
ATOM   4062  C   GLY B  97    15.202  55.203  73.694  1.00 13.03       C
ATOM   4063  O   GLY B  97    16.391  54.973  73.475  1.00 11.51       O
ATOM   4064  N   ASP B  98    14.287  55.013  72.744  1.00 10.59       N
ATOM   4065  CA  ASP B  98    14.696  54.339  71.511  1.00 14.52       C
ATOM   4066  C   ASP B  98    13.828  54.568  70.257  1.00 11.84       C
ATOM   4067  O   ASP B  98    13.976  53.870  69.261  1.00 12.42       O
ATOM   4068  CB  ASP B  98    14.759  52.829  71.850  1.00 13.58       C
ATOM   4069  CG  ASP B  98    15.645  52.019  70.922  1.00 15.19       C
ATOM   4070  OD1 ASP B  98    16.611  52.534  70.350  1.00 17.32       O
ATOM   4071  OD2 ASP B  98    15.386  50.790  70.797  1.00 18.17       O
ATOM   4072  N   ALA B  99    12.905  55.528  70.279  1.00 12.00       N
ATOM   4073  CA  ALA B  99    12.109  55.682  69.084  1.00 12.02       C
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ATOM   4074  C    ALA B  99     11.526  57.073  68.981  1.00 13.23        C
ATOM   4075  O    ALA B  99     10.319  57.208  68.798  1.00 13.63        O
ATOM   4076  CB   ALA B  99     10.984  54.603  69.040  1.00 10.69        C
ATOM   4077  N    ASN B 100     12.380  58.106  69.087  1.00 12.44        N
ATOM   4078  CA   ASN B 100     11.871  59.490  68.977  1.00 11.54        C
ATOM   4079  C    ASN B 100     12.519  60.255  67.808  1.00 13.97        C
ATOM   4080  O    ASN B 100     13.555  59.892  67.304  1.00 12.25        O
ATOM   4081  CB   ASN B 100     12.006  60.266  70.311  1.00 13.36        C
ATOM   4082  CG   ASN B 100     13.444  60.596  70.678  1.00 14.54        C
ATOM   4083  OD1  ASN B 100     14.059  59.895  71.500  1.00 13.38        O
ATOM   4084  ND2  ASN B 100     13.979  61.673  70.092  1.00  8.58        N
ATOM   4085  N    LEU B 101     11.873  61.339  67.393  1.00 10.08        N
ATOM   4086  CA   LEU B 101     12.277  62.069  66.199  1.00 12.82        C
ATOM   4087  C    LEU B 101     13.604  62.841  66.246  1.00 11.43        C
ATOM   4088  O    LEU B 101     14.034  63.308  65.220  1.00 11.25        O
ATOM   4089  CB   LEU B 101     11.137  62.982  65.792  1.00 12.37        C
ATOM   4090  CG   LEU B 101     10.129  62.576  64.705  1.00 22.28        C
ATOM   4091  CD1  LEU B 101     10.197  61.126  64.303  1.00 18.92        C
ATOM   4092  CD2  LEU B 101      8.749  63.035  65.128  1.00 16.81        C
ATOM   4093  N    SER B 102     14.230  62.946  67.417  1.00 12.40        N
ATOM   4094  CA   SER B 102     15.528  63.640  67.516  1.00 11.67        C
ATOM   4095  C    SER B 102     16.638  62.667  67.155  1.00 13.44        C
ATOM   4096  O    SER B 102     17.774  63.068  66.882  1.00 13.95        O
ATOM   4097  CB   SER B 102     15.784  64.109  68.944  1.00 12.21        C
ATOM   4098  OG   SER B 102     16.060  63.020  69.840  1.00 13.57        O
ATOM   4099  N    GLY B 103     16.316  61.386  67.238  1.00 11.16        N
ATOM   4100  CA   GLY B 103     17.302  60.368  66.962  1.00 11.75        C
ATOM   4101  C    GLY B 103     18.131  60.079  68.199  1.00 10.81        C
ATOM   4102  O    GLY B 103     19.007  59.242  68.140  1.00 14.63        O
ATOM   4103  N    HIS B 104     17.891  60.774  69.306  1.00 12.14        N
ATOM   4104  CA   HIS B 104     18.693  60.555  70.505  1.00 11.29        C
ATOM   4105  C    HIS B 104     18.069  59.653  71.531  1.00 11.39        C
ATOM   4106  O    HIS B 104     16.878  59.429  71.523  1.00 12.67        O
ATOM   4107  CB   HIS B 104     19.031  61.918  71.164  1.00 11.91        C
ATOM   4108  CG   HIS B 104     20.113  62.671  70.459  1.00 12.72        C
ATOM   4109  ND1  HIS B 104     19.924  63.904  69.844  1.00 14.14        N
ATOM   4110  CD2  HIS B 104     21.412  62.343  70.261  1.00 11.34        C
ATOM   4111  CE1  HIS B 104     21.067  64.292  69.294  1.00  9.28        C
ATOM   4112  NE2  HIS B 104     21.979  63.362  69.533  1.00 12.30        N
ATOM   4113  N    THR B 105     18.907  59.100  72.406  1.00 12.10        N
ATOM   4114  CA   THR B 105     18.439  58.265  73.512  1.00 14.73        C
ATOM   4115  C    THR B 105     18.246  59.198  74.694  1.00 14.64        C
ATOM   4116  O    THR B 105     19.201  59.889  75.095  1.00 14.15        O
ATOM   4117  CB   THR B 105     19.512  57.222  73.899  1.00 12.67        C
ATOM   4118  OG1  THR B 105     19.644  56.315  72.820  1.00 14.75        O
ATOM   4119  CG2  THR B 105     19.125  56.446  75.144  1.00 14.56        C
ATOM   4120  N    TYR B 106     17.026  59.230  75.235  1.00 10.46        N
ATOM   4121  CA   TYR B 106     16.700  60.079  76.363  1.00 13.21        C
ATOM   4122  C    TYR B 106     16.016  59.418  77.524  1.00 14.72        C
ATOM   4123  O    TYR B 106     15.297  58.410  77.335  1.00 15.36        O
ATOM   4124  CB   TYR B 106     15.714  61.154  75.931  1.00 11.46        C
ATOM   4125  CG   TYR B 106     16.246  62.178  74.964  1.00 14.63        C
ATOM   4126  CD1  TYR B 106     17.427  62.897  75.230  1.00 10.94        C
ATOM   4127  CD2  TYR B 106     15.498  62.513  73.839  1.00 13.10        C
ATOM   4128  CE1  TYR B 106     17.834  63.961  74.395  1.00 12.41        C
ATOM   4129  CE2  TYR B 106     15.893  63.573  72.981  1.00 10.64        C
ATOM   4130  CZ   TYR B 106     17.041  64.292  73.273  1.00 11.61        C
ATOM   4131  OH   TYR B 106     17.304  65.330  72.419  1.00 13.44        O
ATOM   4132  N    PRO B 107     16.206  59.981  78.748  1.00 14.30        N
ATOM   4133  CA   PRO B 107     15.579  59.507  79.971  1.00 13.08        C
ATOM   4134  C    PRO B 107     14.147  60.098  79.790  1.00 14.79        C
ATOM   4135  O    PRO B 107     13.880  60.889  78.851  1.00 14.24        O
ATOM   4136  CB   PRO B 107     16.403  60.167  81.096  1.00 15.78        C
ATOM   4137  CG   PRO B 107     16.967  61.408  80.436  1.00 13.43        C
ATOM   4138  CD   PRO B 107     17.338  60.884  79.066  1.00 16.35        C
ATOM   4139  N    ASP B 108     13.249  59.742  80.681  1.00 14.23        N
ATOM   4140  CA   ASP B 108     11.845  60.115  80.503  1.00 15.87        C
ATOM   4141  C    ASP B 108     11.514  61.435  81.137  1.00 14.60        C
ATOM   4142  O    ASP B 108     10.909  61.478  82.219  1.00 14.60        O
ATOM   4143  CB   ASP B 108     11.038  58.955  81.073  1.00 16.21        C
ATOM   4144  CG   ASP B 108      9.571  59.036  80.778  1.00 19.17        C
ATOM   4145  OD1  ASP B 108      9.138  59.698  79.800  1.00 19.86        O
ATOM   4146  OD2  ASP B 108      8.861  58.386  81.551  1.00 19.15        O
ATOM   4147  N    GLN B 109     11.919  62.521  80.451  1.00 14.36        N
ATOM   4148  CA   GLN B 109     11.714  63.900  80.930  1.00 14.29        C
ATOM   4149  C    GLN B 109     11.161  64.868  79.882  1.00 15.18        C
ATOM   4150  O    GLN B 109     11.464  66.079  79.900  1.00 12.50        O
ATOM   4151  CB   GLN B 109     13.037  64.443  81.464  1.00 18.45        C
ATOM   4152  CG   GLN B 109     13.653  63.532  82.528  1.00 19.36        C
ATOM   4153  CD   GLN B 109     14.883  64.116  83.167  1.00 23.38        C
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| ATOM | 4154 | OE1 | GLN | B | 109 | 14.838 | 65.196 | 83.784 | 1.00 | 22.82 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4155 | NE2 | GLN | B | 109 | 16.010 | 63.401 | 83.035 | 1.00 | 23.45 | N |
| ATOM | 4156 | N | SER | B | 110 | 10.332 | 64.356 | 78.982 | 1.00 | 13.70 | N |
| ATOM | 4157 | CA | SER | B | 110 | 9.761 | 65.149 | 77.918 | 1.00 | 15.26 | C |
| ATOM | 4158 | C | SER | B | 110 | 10.822 | 65.935 | 77.126 | 1.00 | 14.36 | C |
| ATOM | 4159 | O | SER | B | 110 | 10.642 | 67.114 | 76.777 | 1.00 | 14.01 | O |
| ATOM | 4160 | CB | SER | B | 110 | 8.682 | 66.095 | 78.495 | 1.00 | 16.72 | C |
| ATOM | 4161 | OG | SER | B | 110 | 7.524 | 65.336 | 78.775 | 1.00 | 17.85 | O |
| ATOM | 4162 | N | LEU | B | 111 | 11.882 | 65.253 | 76.746 | 1.00 | 12.95 | N |
| ATOM | 4163 | CA | LEU | B | 111 | 12.962 | 65.927 | 76.024 | 1.00 | 12.89 | C |
| ATOM | 4164 | C | LEU | B | 111 | 12.855 | 65.857 | 74.508 | 1.00 | 11.87 | C |
| ATOM | 4165 | O | LEU | B | 111 | 13.395 | 66.713 | 73.791 | 1.00 | 10.18 | O |
| ATOM | 4166 | CB | LEU | B | 111 | 14.306 | 65.300 | 76.455 | 1.00 | 12.57 | C |
| ATOM | 4167 | CG | LEU | B | 111 | 14.767 | 65.502 | 77.892 | 1.00 | 15.95 | C |
| ATOM | 4168 | CD1 | LEU | B | 111 | 15.998 | 64.628 | 78.112 | 1.00 | 15.00 | C |
| ATOM | 4169 | CD2 | LEU | B | 111 | 15.156 | 66.975 | 78.133 | 1.00 | 20.62 | C |
| ATOM | 4170 | N | TYR | B | 112 | 12.164 | 64.837 | 74.011 | 1.00 | 12.07 | N |
| ATOM | 4171 | CA | TYR | B | 112 | 12.016 | 64.626 | 72.581 | 1.00 | 12.46 | C |
| ATOM | 4172 | C | TYR | B | 112 | 10.950 | 65.519 | 71.922 | 1.00 | 12.09 | C |
| ATOM | 4173 | O` | TYR | B | 112 | 10.118 | 66.096 | 72.642 | 1.00 | 12.14 | O |
| ATOM | 4174 | CB | TYR | B | 112 | 11.730 | 63.128 | 72.313 | 1.00 | 12.91 | C |
| ATOM | 4175 | CG | TYR | B | 112 | 10.452 | 62.611 | 72.935 | 1.00 | 13.52 | C |
| ATOM | 4176 | CD1 | TYR | B | 112 | 9.232 | 62.862 | 72.328 | 1.00 | 12.05 | C |
| ATOM | 4177 | CD2 | TYR | B | 112 | 10.473 | 61.833 | 74.132 | 1.00 | 15.36 | C |
| ATOM | 4178 | CE1 | TYR | B | 112 | 8.026 | 62.355 | 72.884 | 1.00 | 14.66 | C |
| ATOM | 4179 | CE2 | TYR | B | 112 | 9.262 | 61.324 | 74.699 | 1.00 | 13.73 | C |
| ATOM | 4180 | CZ | TYR | B | 112 | 8.052 | 61.608 | 74.047 | 1.00 | 13.77 | C |
| ATOM | 4181 | OH | TYR | B | 112 | 6.868 | 61.171 | 74.584 | 1.00 | 13.53 | O |
| ATOM | 4182 | N | PRO | B | 113 | 10.977 | 65.650 | 70.568 | 1.00 | 11.91 | N |
| ATOM | 4183 | CA | PRO | B | 113 | 10.030 | 66.471 | 69.799 | 1.00 | 12.11 | C |
| ATOM | 4184 | C | PRO | B | 113 | 8.581 | 66.004 | 70.014 | 1.00 | 12.68 | C |
| ATOM | 4185 | O | PRO | B | 113 | 8.297 | 64.801 | 69.946 | 1.00 | 11.01 | O |
| ATOM | 4186 | CB | PRO | B | 113 | 10.486 | 66.321 | 68.365 | 1.00 | 11.88 | C |
| ATOM | 4187 | CG | PRO | B | 113 | 11.989 | 66.042 | 68.499 | 1.00 | 13.85 | C |
| ATOM | 4188 | CD | PRO | B | 113 | 12.049 | 65.120 | 69.687 | 1.00 | 11.65 | C |
| ATOM | 4189 | N | ALA | B | 114 | 7.699 | 66.960 | 70.274 | 1.00 | 13.56 | N |
| ATOM | 4190 | CA | ALA | B | 114 | 6.319 | 66.673 | 70.624 | 1.00 | 14.54 | C |
| ATOM | 4191 | C | ALA | B | 114 | 5.488 | 65.850 | 69.638 | 1.00 | 15.49 | C |
| ATOM | 4192 | O | ALA | B | 114 | 4.426 | 65.368 | 70.026 | 1.00 | 13.56 | O |
| ATOM | 4193 | CB | ALA | B | 114 | 5.582 | 67.996 | 70.983 | 1.00 | 16.02 | C |
| ATOM | 4194 | N | ASN | B | 115 | 5.950 | 65.700 | 68.390 | 1.00 | 15.34 | N |
| ATOM | 4195 | CA | ASN | B | 115 | 5.202 | 64.865 | 67.405 | 1.00 | 13.13 | C |
| ATOM | 4196 | C | ASN | B | 115 | 5.765 | 63.439 | 67.335 | 1.00 | 11.45 | C |
| ATOM | 4197 | O | ASN | B | 115 | 5.391 | 62.646 | 66.453 | 1.00 | 12.57 | O |
| ATOM | 4198 | CB | ASN | B | 115 | 5.184 | 65.505 | 66.004 | 1.00 | 12.58 | C |
| ATOM | 4199 | CG | ASN | B | 115 | 6.595 | 65.817 | 65.448 | 1.00 | 12.71 | C |
| ATOM | 4200 | OD1 | ASN | B | 115 | 7.559 | 66.004 | 66.215 | 1.00 | 12.78 | O |
| ATOM | 4201 | ND2 | ASN | B | 115 | 6.699 | 65.881 | 64.116 | 1.00 | 13.29 | N |
| ATOM | 4202 | N | SER | B | 116 | 6.626 | 63.077 | 68.301 | 1.00 | 11.30 | N |
| ATOM | 4203 | CA | SER | B | 116 | 7.203 | 61.740 | 68.256 | 1.00 | 12.08 | C |
| ATOM | 4204 | C | SER | B | 116 | 6.219 | 60.586 | 68.517 | 1.00 | 10.99 | C |
| ATOM | 4205 | O | SER | B | 116 | 6.220 | 59.600 | 67.769 | 1.00 | 13.67 | O |
| ATOM | 4206 | CB | SER | B | 116 | 8.381 | 61.592 | 69.232 | 1.00 | 12.16 | C |
| ATOM | 4207 | OG | SER | B | 116 | 9.507 | 62.423 | 68.858 | 1.00 | 14.51 | O |
| ATOM | 4208 | N | VAL | B | 117 | 5.424 | 60.682 | 69.566 | 1.00 | 11.31 | N |
| ATOM | 4209 | CA | VAL | B | 117 | 4.489 | 59.606 | 69.858 | 1.00 | 11.25 | C |
| ATOM | 4210 | C | VAL | B | 117 | 3.480 | 59.511 | 68.695 | 1.00 | 11.07 | C |
| ATOM | 4211 | O | VAL | B | 117 | 3.172 | 58.398 | 68.227 | 1.00 | 13.18 | O |
| ATOM | 4212 | CB | VAL | B | 117 | 3.848 | 59.803 | 71.246 | 1.00 | 10.83 | C |
| ATOM | 4213 | CG1 | VAL | B | 117 | 2.638 | 58.801 | 71.404 | 1.00 | 11.08 | C |
| ATOM | 4214 | CG2 | VAL | B | 117 | 4.888 | 59.527 | 72.325 | 1.00 | 9.77 | C |
| ATOM | 4215 | N | PRO | B | 118 | 2.938 | 60.641 | 68.205 | 1.00 | 11.94 | N |
| ATOM | 4216 | CA | PRO | B | 118 | 2.004 | 60.542 | 67.064 | 1.00 | 13.42 | C |
| ATOM | 4217 | C | PRO | B | 118 | 2.650 | 59.784 | 65.900 | 1.00 | 14.20 | C |
| ATOM | 4218 | O | PRO | B | 118 | 2.017 | 58.951 | 65.276 | 1.00 | 11.36 | O |
| ATOM | 4219 | CB | PRO | B | 118 | 1.762 | 62.003 | 66.661 | 1.00 | 11.56 | C |
| ATOM | 4220 | CG | PRO | B | 118 | 1.769 | 62.669 | 67.986 | 1.00 | 11.99 | C |
| ATOM | 4221 | CD | PRO | B | 118 | 2.896 | 61.993 | 68.787 | 1.00 | 11.60 | C |
| ATOM | 4222 | N | GLN | B | 119 | 3.918 | 60.069 | 65.575 | 1.00 | 13.47 | N |
| ATOM | 4223 | CA | GLN | B | 119 | 4.512 | 59.285 | 64.495 | 1.00 | 13.14 | C |
| ATOM | 4224 | C | GLN | B | 119 | 4.581 | 57.777 | 64.793 | 1.00 | 12.13 | C |
| ATOM | 4225 | O | GLN | B | 119 | 4.506 | 56.962 | 63.887 | 1.00 | 13.66 | O |
| ATOM | 4226 | CB | GLN | B | 119 | 5.895 | 59.812 | 64.159 | 1.00 | 17.67 | C |
| ATOM | 4227 | CG | GLN | B | 119 | 5.806 | 61.119 | 63.427 | 1.00 | 23.83 | C |
| ATOM | 4228 | CD | GLN | B | 119 | 5.147 | 60.947 | 62.077 | 1.00 | 27.30 | C |
| ATOM | 4229 | OE1 | GLN | B | 119 | 3.940 | 61.217 | 61.907 | 1.00 | 32.20 | O |
| ATOM | 4230 | NE2 | GLN | B | 119 | 5.921 | 60.469 | 61.102 | 1.00 | 30.22 | N |
| ATOM | 4231 | N | VAL | B | 120 | 4.750 | 57.386 | 66.049 | 1.00 | 12.27 | N |
| ATOM | 4232 | CA | VAL | B | 120 | 4.810 | 55.954 | 66.333 | 1.00 | 12.95 | C |
| ATOM | 4233 | C | VAL | B | 120 | 3.388 | 55.359 | 66.303 | 1.00 | 13.57 | C |

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ATOM   4234  O    VAL B 120      3.186  54.173  65.997  1.00 14.04          O
ATOM   4235  CB   VAL B 120      5.503  55.672  67.710  1.00 12.89          C
ATOM   4236  CG1  VAL B 120      5.482  54.185  68.042  1.00 15.13          C
ATOM   4237  CG2  VAL B 120      6.942  56.144  67.646  1.00 15.25          C
ATOM   4238  N    VAL B 121      2.396  56.160  66.636  1.00 11.81          N
ATOM   4239  CA   VAL B 121      1.023  55.636  66.569  1.00 15.18          C
ATOM   4240  C    VAL B 121      0.747  55.343  65.095  1.00 13.87          C
ATOM   4241  O    VAL B 121      0.203  54.294  64.753  1.00 15.17          O
ATOM   4242  CB   VAL B 121     -0.011  56.687  67.031  1.00 13.19          C
ATOM   4243  CG1  VAL B 121     -1.464  56.215  66.671  1.00 14.94          C
ATOM   4244  CG2  VAL B 121      0.140  56.961  68.510  1.00 13.51          C
ATOM   4245  N    ARG B 122      1.128  56.272  64.212  1.00 12.27          N
ATOM   4246  CA   ARG B 122      0.862  56.075  62.793  1.00 12.43          C
ATOM   4247  C    ARG B 122      1.596  54.848  62.318  1.00 12.26          C
ATOM   4248  O    ARG B 122      1.051  54.058  61.507  1.00 11.58          O
ATOM   4249  CB   ARG B 122      1.338  57.281  61.973  1.00  9.55          C
ATOM   4250  CG   ARG B 122      1.126  57.222  60.481  1.00 10.62          C
ATOM   4251  CD   ARG B 122     -0.365  57.132  60.092  1.00 12.89          C
ATOM   4252  NE   ARG B 122     -0.816  55.761  59.860  1.00 13.32          N
ATOM   4253  CZ   ARG B 122     -2.036  55.443  59.419  1.00 16.50          C
ATOM   4254  NH1  ARG B 122     -2.927  56.413  59.201  1.00 17.21          N
ATOM   4255  NH2  ARG B 122     -2.340  54.168  59.125  1.00 15.28          N
ATOM   4256  N    ARG B 123      2.825  54.691  62.823  1.00 11.49          N
ATOM   4257  CA   ARG B 123      3.665  53.562  62.450  1.00 12.52          C
ATOM   4258  C    ARG B 123      3.037  52.216  62.877  1.00 15.31          C
ATOM   4259  O    ARG B 123      3.018  51.280  62.096  1.00 13.68          O
ATOM   4260  CB   ARG B 123      5.055  53.697  63.087  1.00 12.72          C
ATOM   4261  CG   ARG B 123      5.869  52.391  63.099  1.00 11.81          C
ATOM   4262  CD   ARG B 123      6.050  51.840  61.692  1.00 12.78          C
ATOM   4263  NE   ARG B 123      6.557  50.474  61.737  1.00 15.23          N
ATOM   4264  CZ   ARG B 123      6.351  49.566  60.795  1.00 14.99          C
ATOM   4265  NH1  ARG B 123      5.621  49.866  59.713  1.00 13.44          N
ATOM   4266  NH2  ARG B 123      6.921  48.363  60.926  1.00 15.88          N
ATOM   4267  N    ILE B 124      2.563  52.136  64.117  1.00 15.78          N
ATOM   4268  CA   ILE B 124      1.955  50.914  64.647  1.00 14.72          C
ATOM   4269  C    ILE B 124      0.732  50.619  63.832  1.00 14.52          C
ATOM   4270  O    ILE B 124      0.507  49.471  63.459  1.00 15.36          O
ATOM   4271  CB   ILE B 124      1.601  51.062  66.145  1.00 16.84          C
ATOM   4272  CG1  ILE B 124      2.871  50.955  66.984  1.00 15.68          C
ATOM   4273  CG2  ILE B 124      0.584  49.986  66.587  1.00 14.12          C
ATOM   4274  CD1  ILE B 124      2.651  51.321  68.435  1.00 12.84          C
ATOM   4275  N    ASN B 125     -0.059  51.637  63.529  1.00 12.69          N
ATOM   4276  CA   ASN B 125     -1.236  51.393  62.705  1.00 15.69          C
ATOM   4277  C    ASN B 125     -0.886  50.891  61.308  1.00 16.04          C
ATOM   4278  O    ASN B 125     -1.581  50.006  60.785  1.00 15.22          O
ATOM   4279  CB   ASN B 125     -2.134  52.643  62.618  1.00 14.55          C
ATOM   4280  CG   ASN B 125     -3.222  52.643  63.713  1.00 17.82          C
ATOM   4281  OD1  ASN B 125     -3.651  51.552  64.184  1.00 14.65          O
ATOM   4282  ND2  ASN B 125     -3.672  53.832  64.113  1.00 14.32          N
ATOM   4283  N    ASN B 126      0.190  51.421  60.706  1.00 12.15          N
ATOM   4284  CA   ASN B 126      0.615  50.961  59.373  1.00 13.52          C
ATOM   4285  C    ASN B 126      1.042  49.483  59.426  1.00 11.76          C
ATOM   4286  O    ASN B 126      0.800  48.719  58.491  1.00 14.35          O
ATOM   4287  CB   ASN B 126      1.827  51.775  58.837  1.00 12.84          C
ATOM   4288  CG   ASN B 126      1.455  53.210  58.475  1.00 12.53          C
ATOM   4289  OD1  ASN B 126      0.296  53.501  58.269  1.00 10.49          O
ATOM   4290  ND2  ASN B 126      2.462  54.112  58.369  1.00 10.01          N
ATOM   4291  N    ALA B 127      1.669  49.098  60.519  1.00 13.77          N
ATOM   4292  CA   ALA B 127      2.162  47.732  60.643  1.00 15.21          C
ATOM   4293  C    ALA B 127      1.008  46.769  60.818  1.00 16.39          C
ATOM   4294  O    ALA B 127      1.005  45.671  60.264  1.00 14.99          O
ATOM   4295  CB   ALA B 127      3.100  47.616  61.855  1.00 14.95          C
ATOM   4296  N    LEU B 128      0.060  47.186  61.632  1.00 15.51          N
ATOM   4297  CA   LEU B 128     -1.088  46.324  61.890  1.00 17.00          C
ATOM   4298  C    LEU B 128     -1.881  46.218  60.605  1.00 17.16          C
ATOM   4299  O    LEU B 128     -2.406  45.135  60.276  1.00 17.58          O
ATOM   4300  CB   LEU B 128     -1.922  46.908  63.024  1.00 17.15          C
ATOM   4301  CG   LEU B 128     -1.249  46.881  64.406  1.00 18.76          C
ATOM   4302  CD1  LEU B 128     -2.185  47.513  65.396  1.00 17.13          C
ATOM   4303  CD2  LEU B 128     -0.926  45.468  64.836  1.00 17.57          C
ATOM   4304  N    GLN B 129     -1.958  47.320  59.855  1.00 15.55          N
ATOM   4305  CA   GLN B 129     -2.668  47.306  58.577  1.00 16.99          C
ATOM   4306  C    GLN B 129     -2.010  46.357  57.565  1.00 17.68          C
ATOM   4307  O    GLN B 129     -2.710  45.644  56.814  1.00 14.61          O
ATOM   4308  CB   GLN B 129     -2.775  48.699  57.996  1.00 18.29          C
ATOM   4309  CG   GLN B 129     -3.804  49.568  58.664  1.00 19.06          C
ATOM   4310  CD   GLN B 129     -3.793  50.937  58.039  1.00 20.81          C
ATOM   4311  OE1  GLN B 129     -2.824  51.677  58.179  1.00 24.60          O
ATOM   4312  NE2  GLN B 129     -4.843  51.265  57.311  1.00 19.96          N
ATOM   4313  N    ARG B 130     -0.677  46.332  57.538  1.00 16.42          N
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| ATOM | 4314 | CA | ARG B 130 | 0.030 | 45.398 | 56.657 | 1.00 16.48 | C |
|---|---|---|---|---|---|---|---|---|
| ATOM | 4315 | C | ARG B 130 | -0.251 | 43.947 | 57.121 | 1.00 15.50 | C |
| ATOM | 4316 | O | ARG B 130 | -0.479 | 43.057 | 56.290 | 1.00 16.29 | O |
| ATOM | 4317 | CB | ARG B 130 | 1.545 | 45.664 | 56.674 | 1.00 15.15 | C |
| ATOM | 4318 | CG | ARG B 130 | 2.322 | 44.881 | 55.592 | 1.00 15.82 | C |
| ATOM | 4319 | CD | ARG B 130 | 1.979 | 45.373 | 54.150 | 1.00 13.63 | C |
| ATOM | 4320 | NE | ARG B 130 | 2.695 | 46.641 | 53.886 | 1.00 15.22 | N |
| ATOM | 4321 | CZ | ARG B 130 | 2.216 | 47.660 | 53.175 | 1.00 15.51 | C |
| ATOM | 4322 | NH1 | ARG B 130 | 0.996 | 47.614 | 52.647 | 1.00 13.60 | N |
| ATOM | 4323 | NH2 | ARG B 130 | 3.008 | 48.720 | 52.926 | 1.00 13.20 | N |
| ATOM | 4324 | N | ALA B 131 | -0.209 | 43.692 | 58.429 | 1.00 15.29 | N |
| ATOM | 4325 | CA | ALA B 131 | -0.505 | 42.334 | 58.939 | 1.00 16.73 | C |
| ATOM | 4326 | C | ALA B 131 | -1.928 | 41.959 | 58.514 | 1.00 18.88 | C |
| ATOM | 4327 | O | ALA B 131 | -2.206 | 40.801 | 58.095 | 1.00 18.11 | O |
| ATOM | 4328 | CB | ALA B 131 | -0.411 | 42.306 | 60.467 | 1.00 17.97 | C |
| ATOM | 4329 | N | ASP B 132 | -2.829 | 42.940 | 58.625 | 1.00 18.50 | N |
| ATOM | 4330 | CA | ASP B 132 | -4.227 | 42.727 | 58.271 | 1.00 19.33 | C |
| ATOM | 4331 | C | ASP B 132 | -4.350 | 42.398 | 56.767 | 1.00 20.38 | C |
| ATOM | 4332 | O | ASP B 132 | -5.047 | 41.453 | 56.402 | 1.00 18.35 | O |
| ATOM | 4333 | CB | ASP B 132 | -5.048 | 43.968 | 58.650 | 1.00 20.86 | C |
| ATOM | 4334 | CG | ASP B 132 | -6.482 | 43.870 | 58.223 | 1.00 23.61 | C |
| ATOM | 4335 | OD1 | ASP B 132 | -7.161 | 42.914 | 58.670 | 1.00 20.37 | O |
| ATOM | 4336 | OD2 | ASP B 132 | -6.933 | 44.745 | 57.450 | 1.00 24.92 | O |
| ATOM | 4337 | N | GLN B 133 | -3.642 | 43.136 | 55.898 | 1.00 18.23 | N |
| ATOM | 4338 | CA | GLN B 133 | -3.681 | 42.901 | 54.435 | 1.00 16.82 | C |
| ATOM | 4339 | C | GLN B 133 | -3.117 | 41.548 | 54.085 | 1.00 19.12 | C |
| ATOM | 4340 | O | GLN B 133 | -3.636 | 40.853 | 53.206 | 1.00 20.25 | O |
| ATOM | 4341 | CB | GLN B 133 | -2.864 | 43.969 | 53.685 | 1.00 14.80 | C |
| ATOM | 4342 | CG | GLN B 133 | -3.488 | 45.363 | 53.693 | 1.00 16.14 | C |
| ATOM | 4343 | CD | GLN B 133 | -2.425 | 46.500 | 53.743 | 1.00 21.47 | C |
| ATOM | 4344 | OE1 | GLN B 133 | -2.766 | 47.681 | 53.896 | 1.00 21.78 | O |
| ATOM | 4345 | NE2 | GLN B 133 | -1.156 | 46.135 | 53.631 | 1.00 15.62 | N |
| ATOM | 4346 | N | ILE B 134 | -2.070 | 41.157 | 54.801 | 1.00 19.03 | N |
| ATOM | 4347 | CA | ILE B 134 | -1.414 | 39.881 | 54.545 | 1.00 21.91 | C |
| ATOM | 4348 | C | ILE B 134 | -2.306 | 38.702 | 54.958 | 1.00 22.50 | C |
| ATOM | 4349 | O | ILE B 134 | -2.401 | 37.705 | 54.219 | 1.00 23.48 | O |
| ATOM | 4350 | CB | ILE B 134 | -0.068 | 39.775 | 55.294 | 1.00 20.00 | C |
| ATOM | 4351 | CG1 | ILE B 134 | 0.928 | 40.793 | 54.748 | 1.00 19.45 | C |
| ATOM | 4352 | CG2 | ILE B 134 | 0.526 | 38.386 | 55.103 | 1.00 19.70 | C |
| ATOM | 4353 | CD1 | ILE B 134 | 2.214 | 40.814 | 55.556 | 1.00 20.32 | C |
| ATOM | 4354 | N | ALA B 135 | -2.954 | 38.835 | 56.116 | 1.00 23.24 | N |
| ATOM | 4355 | CA | ALA B 135 | -3.862 | 37.800 | 56.645 | 1.00 24.64 | C |
| ATOM | 4356 | C | ALA B 135 | -4.993 | 37.572 | 55.652 | 1.00 26.35 | C |
| ATOM | 4357 | O | ALA B 135 | -5.476 | 36.433 | 55.447 | 1.00 26.53 | O |
| ATOM | 4358 | CB | ALA B 135 | -4.467 | 38.245 | 57.994 | 1.00 24.05 | C |
| ATOM | 4359 | N | LYS B 136 | -5.442 | 38.655 | 55.035 | 1.00 25.41 | N |
| ATOM | 4360 | CA | LYS B 136 | -6.520 | 38.523 | 54.087 | 1.00 27.96 | C |
| ATOM | 4361 | C | LYS B 136 | -6.102 | 37.707 | 52.852 | 1.00 29.31 | C |
| ATOM | 4362 | O | LYS B 136 | -6.828 | 36.764 | 52.454 | 1.00 29.28 | O |
| ATOM | 4363 | CB | LYS B 136 | -7.052 | 39.899 | 53.677 | 1.00 27.14 | C |
| ATOM | 4364 | CG | LYS B 136 | -8.294 | 39.832 | 52.787 | 1.00 29.09 | C |
| ATOM | 4365 | CD | LYS B 136 | -8.808 | 41.219 | 52.449 | 1.00 28.15 | C |
| ATOM | 4366 | CE | LYS B 136 | -10.140 | 41.184 | 51.722 | 1.00 26.90 | C |
| ATOM | 4367 | NZ | LYS B 136 | -10.662 | 42.575 | 51.564 | 1.00 26.39 | N |
| ATOM | 4368 | N | ILE B 137 | -4.951 | 38.016 | 52.252 | 1.00 26.54 | N |
| ATOM | 4369 | CA | ILE B 137 | -4.570 | 37.267 | 51.076 | 1.00 26.97 | C |
| ATOM | 4370 | C | ILE B 137 | -4.082 | 35.875 | 51.399 | 1.00 28.35 | C |
| ATOM | 4371 | O | ILE B 137 | -3.966 | 35.060 | 50.500 | 1.00 27.10 | O |
| ATOM | 4372 | CB | ILE B 137 | -3.469 | 37.962 | 50.225 | 1.00 26.94 | C |
| ATOM | 4373 | CG1 | ILE B 137 | -2.160 | 38.029 | 51.009 | 1.00 26.25 | C |
| ATOM | 4374 | CG2 | ILE B 137 | -3.945 | 39.353 | 49.783 | 1.00 24.41 | C |
| ATOM | 4375 | CD1 | ILE B 137 | -0.941 | 38.426 | 50.160 | 1.00 27.79 | C |
| ATOM | 4376 | N | GLU B 138 | -3.779 | 35.592 | 52.664 | 1.00 27.92 | N |
| ATOM | 4377 | CA | GLU B 138 | -3.317 | 34.253 | 53.022 | 1.00 28.33 | C |
| ATOM | 4378 | C | GLU B 138 | -4.476 | 33.408 | 53.516 | 1.00 29.60 | C |
| ATOM | 4379 | O | GLU B 138 | -4.296 | 32.216 | 53.810 | 1.00 29.91 | O |
| ATOM | 4380 | CB | GLU B 138 | -2.216 | 34.295 | 54.116 | 1.00 28.92 | C |
| ATOM | 4381 | CG | GLU B 138 | -0.959 | 35.094 | 53.741 | 1.00 26.89 | C |
| ATOM | 4382 | CD | GLU B 138 | 0.195 | 34.910 | 54.723 | 1.00 27.90 | C |
| ATOM | 4383 | OE1 | GLU B 138 | -0.039 | 34.737 | 55.937 | 1.00 26.99 | O |
| ATOM | 4384 | OE2 | GLU B 138 | 1.366 | 34.957 | 54.290 | 1.00 29.81 | O |
| ATOM | 4385 | N | GLY B 139 | -5.657 | 34.008 | 53.605 | 1.00 30.19 | N |
| ATOM | 4386 | CA | GLY B 139 | -6.809 | 33.275 | 54.110 | 1.00 32.53 | C |
| ATOM | 4387 | C | GLY B 139 | -6.644 | 32.923 | 55.589 | 1.00 34.29 | C |
| ATOM | 4388 | O | GLY B 139 | -7.243 | 31.964 | 56.105 | 1.00 34.30 | O |
| ATOM | 4389 | N | ASP B 140 | -5.813 | 33.699 | 56.280 | 1.00 34.40 | N |
| ATOM | 4390 | CA | ASP B 140 | -5.566 | 33.477 | 57.687 | 1.00 34.31 | C |
| ATOM | 4391 | C | ASP B 140 | -6.581 | 34.182 | 58.581 | 1.00 35.10 | C |
| ATOM | 4392 | O | ASP B 140 | -6.643 | 35.414 | 58.629 | 1.00 34.47 | O |
| ATOM | 4393 | CB | ASP B 140 | -4.148 | 33.926 | 58.027 | 1.00 35.55 | C |

| ATOM | 4394 | CG | ASP | B | 140 | -3.909 | 33.981 | 59.496 | 1.00 | 36.12 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4395 | OD1 | ASP | B | 140 | -4.669 | 33.325 | 60.228 | 1.00 | 35.36 | O |
| ATOM | 4396 | OD2 | ASP | B | 140 | -2.963 | 34.669 | 59.917 | 1.00 | 36.83 | O |
| ATOM | 4397 | N | THR | B | 141 | -7.380 | 33.384 | 59.286 | 1.00 | 34.32 | N |
| ATOM | 4398 | CA | THR | B | 141 | -8.388 | 33.903 | 60.197 | 1.00 | 35.04 | C |
| ATOM | 4399 | C | THR | B | 141 | -7.906 | 33.712 | 61.647 | 1.00 | 35.10 | C |
| ATOM | 4400 | O | THR | B | 141 | -8.673 | 33.817 | 62.601 | 1.00 | 36.34 | O |
| ATOM | 4401 | CB | THR | B | 141 | -9.727 | 33.175 | 59.995 | 1.00 | 36.75 | C |
| ATOM | 4402 | OG1 | THR | B | 141 | -9.593 | 31.816 | 60.417 | 1.00 | 35.83 | O |
| ATOM | 4403 | CG2 | THR | B | 141 | -10.109 | 33.174 | 58.541 | 1.00 | 35.00 | C |
| ATOM | 4404 | N | SER | B | 142 | -6.620 | 33.441 | 61.790 | 1.00 | 35.32 | N |
| ATOM | 4405 | CA | SER | B | 142 | -5.970 | 33.230 | 63.096 | 1.00 | 36.23 | C |
| ATOM | 4406 | C | SER | B | 142 | -6.192 | 34.368 | 64.091 | 1.00 | 36.10 | C |
| ATOM | 4407 | O | SER | B | 142 | -6.061 | 34.174 | 65.309 | 1.00 | 36.70 | O |
| ATOM | 4408 | CB | SER | B | 142 | -4.461 | 33.066 | 62.892 | 1.00 | 36.81 | C |
| ATOM | 4409 | OG | SER | B | 142 | -3.736 | 33.415 | 64.064 | 1.00 | 40.80 | O |
| ATOM | 4410 | N | VAL | B | 143 | -6.519 | 35.547 | 63.569 | 1.00 | 33.68 | N |
| ATOM | 4411 | CA | VAL | B | 143 | -6.714 | 36.744 | 64.383 | 1.00 | 32.39 | C |
| ATOM | 4412 | C | VAL | B | 143 | -7.998 | 37.450 | 63.976 | 1.00 | 32.02 | C |
| ATOM | 4413 | O | VAL | B | 143 | -8.211 | 37.762 | 62.811 | 1.00 | 31.71 | O |
| ATOM | 4414 | CB | VAL | B | 143 | -5.510 | 37.726 | 64.201 | 1.00 | 31.72 | C |
| ATOM | 4415 | CG1 | VAL | B | 143 | -5.781 | 39.045 | 64.895 | 1.00 | 31.48 | C |
| ATOM | 4416 | CG2 | VAL | B | 143 | -4.232 | 37.077 | 64.724 | 1.00 | 33.24 | C |
| ATOM | 4417 | N | GLU | B | 144 | -8.838 | 37.726 | 64.957 | 1.00 | 31.18 | N |
| ATOM | 4418 | CA | GLU | B | 144 | -10.132 | 38.370 | 64.721 | 1.00 | 32.05 | C |
| ATOM | 4419 | C | GLU | B | 144 | -10.067 | 39.835 | 64.316 | 1.00 | 30.28 | C |
| ATOM | 4420 | O | GLU | B | 144 | -10.772 | 40.270 | 63.406 | 1.00 | 28.74 | O |
| ATOM | 4421 | CB | GLU | B | 144 | -11.009 | 38.237 | 65.977 | 1.00 | 33.58 | C |
| ATOM | 4422 | CG | GLU | B | 144 | -10.315 | 37.595 | 67.208 | 1.00 | 37.36 | C |
| ATOM | 4423 | CD | GLU | B | 144 | -8.998 | 38.276 | 67.679 | 1.00 | 41.20 | C |
| ATOM | 4424 | OE1 | GLU | B | 144 | -8.854 | 39.542 | 67.632 | 1.00 | 40.80 | O |
| ATOM | 4425 | OE2 | GLU | B | 144 | -8.101 | 37.517 | 68.126 | 1.00 | 41.17 | O |
| ATOM | 4426 | N | ASN | B | 145 | -9.232 | 40.605 | 65.009 | 1.00 | 29.02 | N |
| ATOM | 4427 | CA | ASN | B | 145 | -9.101 | 42.029 | 64.696 | 1.00 | 27.44 | C |
| ATOM | 4428 | C | ASN | B | 145 | -7.641 | 42.486 | 64.805 | 1.00 | 25.43 | C |
| ATOM | 4429 | O | ASN | B | 145 | -7.111 | 42.668 | 65.900 | 1.00 | 25.14 | O |
| ATOM | 4430 | CB | ASN | B | 145 | -9.968 | 42.853 | 65.633 | 1.00 | 26.93 | C |
| ATOM | 4431 | CG | ASN | B | 145 | -9.689 | 44.345 | 65.515 | 1.00 | 27.19 | C |
| ATOM | 4432 | OD1 | ASN | B | 145 | -9.638 | 45.058 | 66.521 | 1.00 | 30.26 | O |
| ATOM | 4433 | ND2 | ASN | B | 145 | -9.509 | 44.819 | 64.300 | 1.00 | 25.46 | N |
| ATOM | 4434 | N | TRP | B | 146 | -6.990 | 42.629 | 63.654 | 1.00 | 23.74 | N |
| ATOM | 4435 | CA | TRP | B | 146 | -5.593 | 43.064 | 63.606 | 1.00 | 21.85 | C |
| ATOM | 4436 | C | TRP | B | 146 | -5.390 | 44.509 | 64.072 | 1.00 | 21.94 | C |
| ATOM | 4437 | O | TRP | B | 146 | -4.328 | 44.867 | 64.595 | 1.00 | 21.69 | O |
| ATOM | 4438 | CB | TRP | B | 146 | -5.055 | 42.934 | 62.178 | 1.00 | 20.22 | C |
| ATOM | 4439 | CG | TRP | B | 146 | -4.595 | 41.552 | 61.875 | 1.00 | 18.98 | C |
| ATOM | 4440 | CD1 | TRP | B | 146 | -5.254 | 40.616 | 61.125 | 1.00 | 19.82 | C |
| ATOM | 4441 | CD2 | TRP | B | 146 | -3.422 | 40.913 | 62.384 | 1.00 | 21.06 | C |
| ATOM | 4442 | NE1 | TRP | B | 146 | -4.563 | 39.419 | 61.143 | 1.00 | 22.23 | N |
| ATOM | 4443 | CE2 | TRP | B | 146 | -3.430 | 39.578 | 61.905 | 1.00 | 21.00 | C |
| ATOM | 4444 | CE3 | TRP | B | 146 | -2.361 | 41.334 | 63.207 | 1.00 | 20.07 | C |
| ATOM | 4445 | CZ2 | TRP | B | 146 | -2.420 | 38.665 | 62.218 | 1.00 | 23.62 | C |
| ATOM | 4446 | CZ3 | TRP | B | 146 | -1.348 | 40.404 | 63.531 | 1.00 | 24.23 | C |
| ATOM | 4447 | CH2 | TRP | B | 146 | -1.390 | 39.087 | 63.032 | 1.00 | 23.31 | C |
| ATOM | 4448 | N | LEU | B | 147 | -6.398 | 45.335 | 63.852 | 1.00 | 19.40 | N |
| ATOM | 4449 | CA | LEU | B | 147 | -6.299 | 46.732 | 64.226 | 1.00 | 21.01 | C |
| ATOM | 4450 | C | LEU | B | 147 | -6.681 | 46.925 | 65.672 | 1.00 | 19.78 | C |
| ATOM | 4451 | O | LEU | B | 147 | -7.708 | 47.525 | 65.985 | 1.00 | 21.62 | O |
| ATOM | 4452 | CB | LEU | B | 147 | -7.185 | 47.571 | 63.313 | 1.00 | 19.97 | C |
| ATOM | 4453 | CG | LEU | B | 147 | -6.513 | 47.720 | 61.937 | 1.00 | 21.53 | C |
| ATOM | 4454 | CD1 | LEU | B | 147 | -7.495 | 48.167 | 60.908 | 1.00 | 24.49 | C |
| ATOM | 4455 | CD2 | LEU | B | 147 | -5.385 | 48.742 | 62.057 | 1.00 | 19.61 | C |
| ATOM | 4456 | N | ALA | B | 148 | -5.847 | 46.396 | 66.551 | 1.00 | 19.10 | N |
| ATOM | 4457 | CA | ALA | B | 148 | -6.086 | 46.521 | 67.970 | 1.00 | 19.05 | C |
| ATOM | 4458 | C | ALA | B | 148 | -5.994 | 48.006 | 68.367 | 1.00 | 20.38 | C |
| ATOM | 4459 | O | ALA | B | 148 | -5.179 | 48.765 | 67.812 | 1.00 | 19.55 | O |
| ATOM | 4460 | CB | ALA | B | 148 | -5.058 | 45.728 | 68.727 | 1.00 | 17.81 | C |
| ATOM | 4461 | N | PRO | B | 149 | -6.819 | 48.437 | 69.344 | 1.00 | 18.99 | N |
| ATOM | 4462 | CA | PRO | B | 149 | -6.779 | 49.833 | 69.781 | 1.00 | 19.70 | C |
| ATOM | 4463 | C | PRO | B | 149 | -5.426 | 50.158 | 70.410 | 1.00 | 18.40 | C |
| ATOM | 4464 | O | PRO | B | 149 | -4.804 | 49.328 | 71.108 | 1.00 | 16.75 | O |
| ATOM | 4465 | CB | PRO | B | 149 | -7.926 | 49.927 | 70.798 | 1.00 | 19.79 | C |
| ATOM | 4466 | CG | PRO | B | 149 | -8.011 | 48.542 | 71.339 | 1.00 | 19.75 | C |
| ATOM | 4467 | CD | PRO | B | 149 | -7.782 | 47.656 | 70.138 | 1.00 | 20.05 | C |
| ATOM | 4468 | N | ILE | B | 150 | -4.975 | 51.380 | 70.150 | 1.00 | 19.88 | N |
| ATOM | 4469 | CA | ILE | B | 150 | -3.708 | 51.859 | 70.688 | 1.00 | 15.73 | C |
| ATOM | 4470 | C | ILE | B | 150 | -3.963 | 52.911 | 71.758 | 1.00 | 16.43 | C |
| ATOM | 4471 | O | ILE | B | 150 | -4.690 | 53.878 | 71.512 | 1.00 | 17.20 | O |
| ATOM | 4472 | CB | ILE | B | 150 | -2.834 | 52.552 | 69.592 | 1.00 | 17.33 | C |
| ATOM | 4473 | CG1 | ILE | B | 150 | -2.571 | 51.616 | 68.422 | 1.00 | 14.74 | C |

| ATOM | 4474 | CG2 | ILE | B | 150 | -1.501 | 53.030 | 70.216 | 1.00 | 16.27 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4475 | CD1 | ILE | B | 150 | -1.910 | 52.351 | 67.206 | 1.00 | 14.47 | C |
| ATOM | 4476 | N | VAL | B | 151 | -3.381 | 52.725 | 72.944 | 1.00 | 16.11 | N |
| ATOM | 4477 | CA | VAL | B | 151 | -3.498 | 53.727 | 74.001 | 1.00 | 16.13 | C |
| ATOM | 4478 | C | VAL | B | 151 | -2.084 | 54.335 | 74.050 | 1.00 | 15.64 | C |
| ATOM | 4479 | O | VAL | B | 151 | -1.101 | 53.613 | 74.254 | 1.00 | 15.37 | O |
| ATOM | 4480 | CB | VAL | B | 151 | -3.872 | 53.129 | 75.355 | 1.00 | 18.01 | C |
| ATOM | 4481 | CG1 | VAL | B | 151 | -3.690 | 54.187 | 76.451 | 1.00 | 15.79 | C |
| ATOM | 4482 | CG2 | VAL | B | 151 | -5.355 | 52.658 | 75.309 | 1.00 | 17.78 | C |
| ATOM | 4483 | N | ALA | B | 152 | -2.015 | 55.641 | 73.848 | 1.00 | 16.98 | N |
| ATOM | 4484 | CA | ALA | B | 152 | -0.724 | 56.354 | 73.767 | 1.00 | 17.18 | C |
| ATOM | 4485 | C | ALA | B | 152 | -0.544 | 57.457 | 74.808 | 1.00 | 17.17 | C |
| ATOM | 4486 | O | ALA | B | 152 | -1.510 | 58.060 | 75.292 | 1.00 | 17.20 | O |
| ATOM | 4487 | CB | ALA | B | 152 | -0.522 | 56.906 | 72.332 | 1.00 | 16.18 | C |
| ATOM | 4488 | N | ASP | B | 153 | 0.729 | 57.676 | 75.124 | 1.00 | 16.58 | N |
| ATOM | 4489 | CA | ASP | B | 153 | 1.239 | 58.599 | 76.138 | 1.00 | 16.34 | C |
| ATOM | 4490 | C | ASP | B | 153 | 1.332 | 60.054 | 75.655 | 1.00 | 16.29 | C |
| ATOM | 4491 | O | ASP | B | 153 | 2.115 | 60.393 | 74.771 | 1.00 | 15.60 | O |
| ATOM | 4492 | CB | ASP | B | 153 | 2.611 | 58.049 | 76.529 | 1.00 | 14.70 | C |
| ATOM | 4493 | CG | ASP | B | 153 | 3.182 | 58.638 | 77.798 | 1.00 | 13.57 | C |
| ATOM | 4494 | OD1 | ASP | B | 153 | 2.740 | 59.688 | 78.261 | 1.00 | 14.77 | O |
| ATOM | 4495 | OD2 | ASP | B | 153 | 4.122 | 58.018 | 78.334 | 1.00 | 14.96 | O |
| ATOM | 4496 | N | GLY | B | 154 | 0.526 | 60.913 | 76.264 | 1.00 | 15.55 | N |
| ATOM | 4497 | CA | GLY | B | 154 | 0.518 | 62.314 | 75.929 | 1.00 | 16.21 | C |
| ATOM | 4498 | C | GLY | B | 154 | 1.352 | 63.088 | 76.943 | 1.00 | 15.88 | C |
| ATOM | 4499 | O | GLY | B | 154 | 1.386 | 64.329 | 76.916 | 1.00 | 16.58 | O |
| ATOM | 4500 | N | GLU | B | 155 | 2.019 | 62.338 | 77.818 | 1.00 | 16.75 | N |
| ATOM | 4501 | CA | GLU | B | 155 | 2.887 | 62.884 | 78.867 | 1.00 | 16.76 | C |
| ATOM | 4502 | C | GLU | B | 155 | 2.271 | 64.031 | 79.635 | 1.00 | 17.86 | C |
| ATOM | 4503 | O | GLU | B | 155 | 1.170 | 63.864 | 80.162 | 1.00 | 17.80 | O |
| ATOM | 4504 | CB | GLU | B | 155 | 4.249 | 63.241 | 78.249 | 1.00 | 18.28 | C |
| ATOM | 4505 | CG | GLU | B | 155 | 5.024 | 61.911 | 78.035 | 1.00 | 21.15 | C |
| ATOM | 4506 | CD | GLU | B | 155 | 6.475 | 62.028 | 77.572 | 1.00 | 24.64 | C |
| ATOM | 4507 | OE1 | GLU | B | 155 | 7.061 | 63.134 | 77.536 | 1.00 | 25.81 | O |
| ATOM | 4508 | OE2 | GLU | B | 155 | 7.031 | 60.964 | 77.247 | 1.00 | 23.68 | O |
| ATOM | 4509 | N | ALA | B | 156 | 2.952 | 65.176 | 79.739 | 1.00 | 17.53 | N |
| ATOM | 4510 | CA | ALA | B | 156 | 2.351 | 66.303 | 80.440 | 1.00 | 18.11 | C |
| ATOM | 4511 | C | ALA | B | 156 | 1.951 | 67.360 | 79.425 | 1.00 | 17.45 | C |
| ATOM | 4512 | O | ALA | B | 156 | 1.832 | 68.554 | 79.762 | 1.00 | 19.37 | O |
| ATOM | 4513 | CB | ALA | B | 156 | 3.304 | 66.873 | 81.472 | 1.00 | 18.29 | C |
| ATOM | 4514 | N | GLY | B | 157 | 1.767 | 66.923 | 78.171 | 1.00 | 14.77 | N |
| ATOM | 4515 | CA | GLY | B | 157 | 1.325 | 67.792 | 77.097 | 1.00 | 15.28 | C |
| ATOM | 4516 | C | GLY | B | 157 | 2.349 | 68.709 | 76.438 | 1.00 | 15.01 | C |
| ATOM | 4517 | O | GLY | B | 157 | 1.993 | 69.503 | 75.549 | 1.00 | 14.16 | O |
| ATOM | 4518 | N | PHE | B | 158 | 3.605 | 68.657 | 76.896 | 1.00 | 14.94 | N |
| ATOM | 4519 | CA | PHE | B | 158 | 4.644 | 69.463 | 76.255 | 1.00 | 15.41 | C |
| ATOM | 4520 | C | PHE | B | 158 | 4.398 | 70.995 | 76.262 | 1.00 | 16.55 | C |
| ATOM | 4521 | O | PHE | B | 158 | 4.813 | 71.726 | 75.338 | 1.00 | 15.46 | O |
| ATOM | 4522 | CB | PHE | B | 158 | 4.854 | 68.998 | 74.812 | 1.00 | 16.83 | C |
| ATOM | 4523 | CG | PHE | B | 158 | 5.398 | 67.605 | 74.702 | 1.00 | 17.11 | C |
| ATOM | 4524 | CD1 | PHE | B | 158 | 6.774 | 67.370 | 74.760 | 1.00 | 17.39 | C |
| ATOM | 4525 | CD2 | PHE | B | 158 | 4.546 | 66.522 | 74.636 | 1.00 | 16.23 | C |
| ATOM | 4526 | CE1 | PHE | B | 158 | 7.282 | 66.053 | 74.765 | 1.00 | 19.89 | C |
| ATOM | 4527 | CE2 | PHE | B | 158 | 5.051 | 65.214 | 74.637 | 1.00 | 17.17 | C |
| ATOM | 4528 | CZ | PHE | B | 158 | 6.424 | 64.997 | 74.704 | 1.00 | 16.49 | C |
| ATOM | 4529 | N | GLY | B | 159 | 3.744 | 71.472 | 77.308 | 1.00 | 19.56 | N |
| ATOM | 4530 | CA | GLY | B | 159 | 3.492 | 72.899 | 77.389 | 1.00 | 19.32 | C |
| ATOM | 4531 | C | GLY | B | 159 | 2.179 | 73.241 | 78.059 | 1.00 | 19.27 | C |
| ATOM | 4532 | O | GLY | B | 159 | 1.846 | 72.692 | 79.101 | 1.00 | 22.33 | O |
| ATOM | 4533 | N | GLY | B | 160 | 1.435 | 74.160 | 77.453 | 1.00 | 19.73 | N |
| ATOM | 4534 | CA | GLY | B | 160 | 0.165 | 74.561 | 78.028 | 1.00 | 20.80 | C |
| ATOM | 4535 | C | GLY | B | 160 | -0.988 | 73.832 | 77.354 | 1.00 | 19.87 | C |
| ATOM | 4536 | O | GLY | B | 160 | -0.799 | 72.858 | 76.645 | 1.00 | 18.85 | O |
| ATOM | 4537 | N | ALA | B | 161 | -2.199 | 74.327 | 77.553 | 1.00 | 20.32 | N |
| ATOM | 4538 | CA | ALA | B | 161 | -3.381 | 73.714 | 76.952 | 1.00 | 18.92 | C |
| ATOM | 4539 | C | ALA | B | 161 | -3.348 | 73.616 | 75.427 | 1.00 | 17.92 | C |
| ATOM | 4540 | O | ALA | B | 161 | -3.955 | 72.696 | 74.874 | 1.00 | 19.68 | O |
| ATOM | 4541 | CB | ALA | B | 161 | -4.663 | 74.514 | 77.379 | 1.00 | 20.32 | C |
| ATOM | 4542 | N | LEU | B | 162 | -2.700 | 74.561 | 74.750 | 1.00 | 16.15 | N |
| ATOM | 4543 | CA | LEU | B | 162 | -2.660 | 74.536 | 73.294 | 1.00 | 18.42 | C |
| ATOM | 4544 | C | LEU | B | 162 | -1.677 | 73.450 | 72.807 | 1.00 | 19.70 | C |
| ATOM | 4545 | O | LEU | B | 162 | -1.867 | 72.897 | 71.728 | 1.00 | 20.32 | O |
| ATOM | 4546 | CB | LEU | B | 162 | -2.259 | 75.888 | 72.715 | 1.00 | 18.24 | C |
| ATOM | 4547 | CG | LEU | B | 162 | -3.170 | 77.092 | 73.050 | 1.00 | 20.37 | C |
| ATOM | 4548 | CD1 | LEU | B | 162 | -2.711 | 78.340 | 72.280 | 1.00 | 17.14 | C |
| ATOM | 4549 | CD2 | LEU | B | 162 | -4.606 | 76.769 | 72.663 | 1.00 | 20.07 | C |
| ATOM | 4550 | N | ASN | B | 163 | -0.621 | 73.175 | 73.583 | 1.00 | 18.19 | N |
| ATOM | 4551 | CA | ASN | B | 163 | 0.327 | 72.123 | 73.171 | 1.00 | 16.74 | C |
| ATOM | 4552 | C | ASN | B | 163 | -0.406 | 70.785 | 73.391 | 1.00 | 17.43 | C |
| ATOM | 4553 | O | ASN | B | 163 | -0.233 | 69.810 | 72.647 | 1.00 | 15.24 | O |

| | | | | | | | | | | | |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4554 | CB  | ASN | B | 163 | 1.622  | 72.189 | 74.023 | 1.00 | 17.60 | C |
| ATOM | 4555 | CG  | ASN | B | 163 | 2.460  | 73.470 | 73.771 | 1.00 | 16.91 | C |
| ATOM | 4556 | OD1 | ASN | B | 163 | 3.253  | 73.544 | 72.820 | 1.00 | 19.34 | O |
| ATOM | 4557 | ND2 | ASN | B | 163 | 2.280  | 74.473 | 74.626 | 1.00 | 15.42 | N |
| ATOM | 4558 | N   | VAL | B | 164 | -1.225 | 70.748 | 74.437 | 1.00 | 15.70 | N |
| ATOM | 4559 | CA  | VAL | B | 164 | -1.989 | 69.558 | 74.761 | 1.00 | 16.85 | C |
| ATOM | 4560 | C   | VAL | B | 164 | -2.933 | 69.360 | 73.587 | 1.00 | 16.90 | C |
| ATOM | 4561 | O   | VAL | B | 164 | -3.064 | 68.253 | 73.047 | 1.00 | 17.58 | O |
| ATOM | 4562 | CB  | VAL | B | 164 | -2.844 | 69.781 | 76.013 | 1.00 | 12.62 | C |
| ATOM | 4563 | CG1 | VAL | B | 164 | -3.919 | 68.681 | 76.085 | 1.00 | 15.86 | C |
| ATOM | 4564 | CG2 | VAL | B | 164 | -1.979 | 69.720 | 77.252 | 1.00 | 17.30 | C |
| ATOM | 4565 | N   | TYR | B | 165 | -3.575 | 70.444 | 73.184 | 1.00 | 16.70 | N |
| ATOM | 4566 | CA  | TYR | B | 165 | -4.530 | 70.352 | 72.083 | 1.00 | 18.84 | C |
| ATOM | 4567 | C   | TYR | B | 165 | -3.886 | 69.821 | 70.797 | 1.00 | 17.70 | C |
| ATOM | 4568 | O   | TYR | B | 165 | -4.429 | 68.939 | 70.138 | 1.00 | 17.37 | O |
| ATOM | 4569 | CB  | TYR | B | 165 | -5.166 | 71.710 | 71.826 | 1.00 | 16.41 | C |
| ATOM | 4570 | CG  | TYR | B | 165 | -6.243 | 71.680 | 70.762 | 1.00 | 20.16 | C |
| ATOM | 4571 | CD1 | TYR | B | 165 | -5.906 | 71.784 | 69.411 | 1.00 | 18.34 | C |
| ATOM | 4572 | CD2 | TYR | B | 165 | -7.600 | 71.485 | 71.107 | 1.00 | 15.79 | C |
| ATOM | 4573 | CE1 | TYR | B | 165 | -6.887 | 71.687 | 68.398 | 1.00 | 20.78 | C |
| ATOM | 4574 | CE2 | TYR | B | 165 | -8.595 | 71.398 | 70.110 | 1.00 | 18.71 | C |
| ATOM | 4575 | CZ  | TYR | B | 165 | -8.231 | 71.491 | 68.754 | 1.00 | 20.51 | C |
| ATOM | 4576 | OH  | TYR | B | 165 | -9.171 | 71.349 | 67.734 | 1.00 | 22.15 | O |
| ATOM | 4577 | N   | GLU | B | 166 | -2.728 | 70.355 | 70.427 | 1.00 | 19.08 | N |
| ATOM | 4578 | CA  | GLU | B | 166 | -2.092 | 69.881 | 69.206 | 1.00 | 17.60 | C |
| ATOM | 4579 | C   | GLU | B | 166 | -1.583 | 68.433 | 69.289 | 1.00 | 15.53 | C |
| ATOM | 4580 | O   | GLU | B | 166 | -1.570 | 67.723 | 68.284 | 1.00 | 15.87 | O |
| ATOM | 4581 | CB  | GLU | B | 166 | -0.962 | 70.823 | 68.808 | 1.00 | 18.12 | C |
| ATOM | 4582 | CG  | GLU | B | 166 | -1.447 | 72.153 | 68.226 | 1.00 | 18.36 | C |
| ATOM | 4583 | CD  | GLU | B | 166 | -2.311 | 71.965 | 67.011 | 1.00 | 20.05 | C |
| ATOM | 4584 | OE1 | GLU | B | 166 | -1.905 | 71.218 | 66.068 | 1.00 | 18.66 | O |
| ATOM | 4585 | OE2 | GLU | B | 166 | -3.397 | 72.582 | 66.993 | 1.00 | 19.27 | O |
| ATOM | 4586 | N   | LEU | B | 167 | -1.177 | 67.992 | 70.474 | 1.00 | 14.48 | N |
| ATOM | 4587 | CA  | LEU | B | 167 | -0.695 | 66.629 | 70.604 | 1.00 | 14.71 | C |
| ATOM | 4588 | C   | LEU | B | 167 | -1.908 | 65.695 | 70.437 | 1.00 | 16.05 | C |
| ATOM | 4589 | O   | LEU | B | 167 | -1.862 | 64.712 | 69.684 | 1.00 | 13.04 | O |
| ATOM | 4590 | CB  | LEU | B | 167 | -0.032 | 66.427 | 71.965 | 1.00 | 12.46 | C |
| ATOM | 4591 | CG  | LEU | B | 167 | 0.470  | 65.048 | 72.306 | 1.00 | 13.18 | C |
| ATOM | 4592 | CD1 | LEU | B | 167 | 1.231  | 64.446 | 71.081 | 1.00 | 13.94 | C |
| ATOM | 4593 | CD2 | LEU | B | 167 | 1.367  | 65.149 | 73.538 | 1.00 | 13.74 | C |
| ATOM | 4594 | N   | GLN | B | 168 | -3.013 | 66.013 | 71.106 | 1.00 | 16.01 | N |
| ATOM | 4595 | CA  | GLN | B | 168 | -4.184 | 65.134 | 70.979 | 1.00 | 16.27 | C |
| ATOM | 4596 | C   | GLN | B | 168 | -4.632 | 65.040 | 69.526 | 1.00 | 15.28 | C |
| ATOM | 4597 | O   | GLN | B | 168 | -4.918 | 63.952 | 69.012 | 1.00 | 14.37 | O |
| ATOM | 4598 | CB  | GLN | B | 168 | -5.349 | 65.621 | 71.894 | 1.00 | 18.62 | C |
| ATOM | 4599 | CG  | GLN | B | 168 | -6.647 | 64.804 | 71.751 | 1.00 | 17.73 | C |
| ATOM | 4600 | CD  | GLN | B | 168 | -6.602 | 63.467 | 72.474 | 1.00 | 19.89 | C |
| ATOM | 4601 | OE1 | GLN | B | 168 | -5.624 | 62.723 | 72.400 | 1.00 | 19.91 | O |
| ATOM | 4602 | NE2 | GLN | B | 168 | -7.659 | 63.166 | 73.196 | 1.00 | 16.57 | N |
| ATOM | 4603 | N   | LYS | B | 169 | -4.728 | 66.179 | 68.863 | 1.00 | 13.65 | N |
| ATOM | 4604 | CA  | LYS | B | 169 | -5.135 | 66.217 | 67.476 | 1.00 | 15.13 | C |
| ATOM | 4605 | C   | LYS | B | 169 | -4.194 | 65.380 | 66.573 | 1.00 | 16.83 | C |
| ATOM | 4606 | O   | LYS | B | 169 | -4.642 | 64.660 | 65.697 | 1.00 | 16.63 | O |
| ATOM | 4607 | CB  | LYS | B | 169 | -5.174 | 67.657 | 67.013 | 1.00 | 16.17 | C |
| ATOM | 4608 | CG  | LYS | B | 169 | -5.364 | 67.874 | 65.480 | 1.00 | 15.73 | C |
| ATOM | 4609 | CD  | LYS | B | 169 | -5.421 | 69.342 | 65.094 | 1.00 | 20.02 | C |
| ATOM | 4610 | CE  | LYS | B | 169 | -5.459 | 69.530 | 63.578 | 1.00 | 22.01 | C |
| ATOM | 4611 | NZ  | LYS | B | 169 | -5.702 | 70.957 | 63.162 | 1.00 | 22.19 | N |
| ATOM | 4612 | N   | ALA | B | 170 | -2.893 | 65.479 | 66.802 | 1.00 | 13.48 | N |
| ATOM | 4613 | CA  | ALA | B | 170 | -1.949 | 64.693 | 66.001 | 1.00 | 14.51 | C |
| ATOM | 4614 | C   | ALA | B | 170 | -2.027 | 63.186 | 66.324 | 1.00 | 12.43 | C |
| ATOM | 4615 | O   | ALA | B | 170 | -1.825 | 62.349 | 65.418 | 1.00 | 14.32 | O |
| ATOM | 4616 | CB  | ALA | B | 170 | -0.527 | 65.193 | 66.235 | 1.00 | 15.57 | C |
| ATOM | 4617 | N   | LEU | B | 171 | -2.297 | 62.830 | 67.585 | 1.00 | 13.54 | N |
| ATOM | 4618 | CA  | LEU | B | 171 | -2.406 | 61.418 | 67.960 | 1.00 | 12.63 | C |
| ATOM | 4619 | C   | LEU | B | 171 | -3.626 | 60.852 | 67.203 | 1.00 | 14.08 | C |
| ATOM | 4620 | O   | LEU | B | 171 | -3.585 | 59.723 | 66.657 | 1.00 | 14.33 | O |
| ATOM | 4621 | CB  | LEU | B | 171 | -2.604 | 61.259 | 69.467 | 1.00 | 12.49 | C |
| ATOM | 4622 | CG  | LEU | B | 171 | -1.411 | 61.581 | 70.371 | 1.00 | 9.18  | C |
| ATOM | 4623 | CD1 | LEU | B | 171 | -1.876 | 61.689 | 71.799 | 1.00 | 12.90 | C |
| ATOM | 4624 | CD2 | LEU | B | 171 | -0.334 | 60.503 | 70.219 | 1.00 | 12.13 | C |
| ATOM | 4625 | N   | ILE | B | 172 | -4.705 | 61.650 | 67.164 | 1.00 | 18.59 | N |
| ATOM | 4626 | CA  | ILE | B | 172 | -5.934 | 61.256 | 66.467 | 1.00 | 18.13 | C |
| ATOM | 4627 | C   | ILE | B | 172 | -5.702 | 61.096 | 64.958 | 1.00 | 18.02 | C |
| ATOM | 4628 | O   | ILE | B | 172 | -6.098 | 60.096 | 64.364 | 1.00 | 17.91 | O |
| ATOM | 4629 | CB  | ILE | B | 172 | -7.076 | 62.268 | 66.763 | 1.00 | 18.25 | C |
| ATOM | 4630 | CG1 | ILE | B | 172 | -7.608 | 62.048 | 68.190 | 1.00 | 18.07 | C |
| ATOM | 4631 | CG2 | ILE | B | 172 | -8.229 | 62.108 | 65.725 | 1.00 | 17.07 | C |
| ATOM | 4632 | CD1 | ILE | B | 172 | -8.432 | 63.200 | 68.738 | 1.00 | 19.63 | C |
| ATOM | 4633 | N   | ALA | B | 173 | -5.018 | 62.051 | 64.342 | 1.00 | 17.38 | N |

| ATOM | 4634 | CA  | ALA B 173 | -4.741 | 61.982 | 62.915 | 1.00 17.24 | C |
| ATOM | 4635 | C   | ALA B 173 | -4.005 | 60.681 | 62.598 | 1.00 17.39 | C |
| ATOM | 4636 | O   | ALA B 173 | -4.229 | 60.074 | 61.542 | 1.00 18.08 | O |
| ATOM | 4637 | CB  | ALA B 173 | -3.897 | 63.230 | 62.463 | 1.00 19.11 | C |
| ATOM | 4638 | N   | ALA B 174 | -3.154 | 60.255 | 63.525 | 1.00 15.98 | N |
| ATOM | 4639 | CA  | ALA B 174 | -2.361 | 59.038 | 63.384 | 1.00 16.53 | C |
| ATOM | 4640 | C   | ALA B 174 | -3.135 | 57.756 | 63.682 | 1.00 16.33 | C |
| ATOM | 4641 | O   | ALA B 174 | -2.638 | 56.651 | 63.413 | 1.00 15.44 | O |
| ATOM | 4642 | CB  | ALA B 174 | -1.107 | 59.114 | 64.272 | 1.00 15.63 | C |
| ATOM | 4643 | N   | GLY B 175 | -4.317 | 57.903 | 64.293 | 1.00 15.36 | N |
| ATOM | 4644 | CA  | GLY B 175 | -5.174 | 56.765 | 64.585 | 1.00 14.31 | C |
| ATOM | 4645 | C   | GLY B 175 | -5.179 | 56.207 | 65.989 | 1.00 15.91 | C |
| ATOM | 4646 | O   | GLY B 175 | -5.377 | 55.010 | 66.175 | 1.00 17.12 | O |
| ATOM | 4647 | N   | VAL B 176 | -4.927 | 57.048 | 66.994 | 1.00 15.92 | N |
| ATOM | 4648 | CA  | VAL B 176 | -4.891 | 56.577 | 68.377 | 1.00 15.43 | C |
| ATOM | 4649 | C   | VAL B 176 | -6.339 | 56.294 | 68.869 | 1.00 17.01 | C |
| ATOM | 4650 | O   | VAL B 176 | -7.286 | 56.946 | 68.415 | 1.00 16.23 | O |
| ATOM | 4651 | CB  | VAL B 176 | -4.220 | 57.648 | 69.277 | 1.00 14.31 | C |
| ATOM | 4652 | CG1 | VAL B 176 | -5.243 | 58.655 | 69.776 | 1.00 14.32 | C |
| ATOM | 4653 | CG2 | VAL B 176 | -3.489 | 56.989 | 70.415 | 1.00 17.97 | C |
| ATOM | 4654 | N   | ALA B 177 | -6.492 | 55.356 | 69.805 | 1.00 18.23 | N |
| ATOM | 4655 | CA  | ALA B 177 | -7.823 | 55.033 | 70.357 | 1.00 19.09 | C |
| ATOM | 4656 | C   | ALA B 177 | -7.981 | 55.694 | 71.719 | 1.00 18.91 | C |
| ATOM | 4657 | O   | ALA B 177 | -9.077 | 56.072 | 72.113 | 1.00 20.33 | O |
| ATOM | 4658 | CB  | ALA B 177 | -8.005 | 53.524 | 70.495 | 1.00 19.58 | C |
| ATOM | 4659 | N   | GLY B 178 | -6.872 | 55.844 | 72.430 | 1.00 17.41 | N |
| ATOM | 4660 | CA  | GLY B 178 | -6.913 | 56.472 | 73.735 | 1.00 19.40 | C |
| ATOM | 4661 | C   | GLY B 178 | -5.595 | 57.182 | 74.070 | 1.00 19.66 | C |
| ATOM | 4662 | O   | GLY B 178 | -4.534 | 56.790 | 73.585 | 1.00 19.33 | O |
| ATOM | 4663 | N   | SER B 179 | -5.669 | 58.195 | 74.928 | 1.00 19.91 | N |
| ATOM | 4664 | CA  | SER B 179 | -4.481 | 58.935 | 75.298 | 1.00 19.13 | C |
| ATOM | 4665 | C   | SER B 179 | -4.491 | 59.265 | 76.786 | 1.00 19.26 | C |
| ATOM | 4666 | O   | SER B 179 | -5.555 | 59.528 | 77.360 | 1.00 20.05 | O |
| ATOM | 4667 | CB  | SER B 179 | -4.414 | 60.204 | 74.441 | 1.00 18.01 | C |
| ATOM | 4668 | OG  | SER B 179 | -5.503 | 61.090 | 74.660 | 1.00 17.71 | O |
| ATOM | 4669 | N   | HIS B 180 | -3.321 | 59.261 | 77.419 | 1.00 17.89 | N |
| ATOM | 4670 | CA  | HIS B 180 | -3.250 | 59.583 | 78.841 | 1.00 17.55 | C |
| ATOM | 4671 | C   | HIS B 180 | -2.467 | 60.874 | 79.104 | 1.00 17.19 | C |
| ATOM | 4672 | O   | HIS B 180 | -1.523 | 61.203 | 78.374 | 1.00 17.04 | O |
| ATOM | 4673 | CB  | HIS B 180 | -2.733 | 58.385 | 79.658 | 1.00 20.57 | C |
| ATOM | 4674 | CG  | HIS B 180 | -1.294 | 58.017 | 79.428 | 1.00 21.24 | C |
| ATOM | 4675 | ND1 | HIS B 180 | -0.911 | 56.801 | 78.886 | 1.00 20.43 | N |
| ATOM | 4676 | CD2 | HIS B 180 | -0.156 | 58.605 | 79.861 | 1.00 20.40 | C |
| ATOM | 4677 | CE1 | HIS B 180 | 0.396 | 56.651 | 79.018 | 1.00 17.73 | C |
| ATOM | 4678 | NE2 | HIS B 180 | 0.877 | 57.731 | 79.609 | 1.00 21.85 | N |
| ATOM | 4679 | N   | TRP B 181 | -2.884 | 61.617 | 80.131 | 1.00 17.06 | N |
| ATOM | 4680 | CA  | TRP B 181 | -2.330 | 62.935 | 80.420 | 1.00 16.42 | C |
| ATOM | 4681 | C   | TRP B 181 | -2.071 | 63.045 | 81.913 | 1.00 18.77 | C |
| ATOM | 4682 | O   | TRP B 181 | -2.963 | 62.769 | 82.725 | 1.00 17.05 | O |
| ATOM | 4683 | CB  | TRP B 181 | -3.359 | 64.001 | 79.989 | 1.00 16.65 | C |
| ATOM | 4684 | CG  | TRP B 181 | -3.817 | 63.804 | 78.585 | 1.00 17.16 | C |
| ATOM | 4685 | CD1 | TRP B 181 | -4.812 | 62.950 | 78.158 | 1.00 17.77 | C |
| ATOM | 4686 | CD2 | TRP B 181 | -3.206 | 64.325 | 77.398 | 1.00 16.32 | C |
| ATOM | 4687 | NE1 | TRP B 181 | -4.839 | 62.903 | 76.789 | 1.00 18.77 | N |
| ATOM | 4688 | CE2 | TRP B 181 | -3.865 | 63.735 | 76.294 | 1.00 17.29 | C |
| ATOM | 4689 | CE3 | TRP B 181 | -2.158 | 65.230 | 77.157 | 1.00 15.49 | C |
| ATOM | 4690 | CZ2 | TRP B 181 | -3.515 | 64.017 | 74.968 | 1.00 16.42 | C |
| ATOM | 4691 | CZ3 | TRP B 181 | -1.812 | 65.511 | 75.841 | 1.00 14.33 | C |
| ATOM | 4692 | CH2 | TRP B 181 | -2.491 | 64.905 | 74.759 | 1.00 17.58 | C |
| ATOM | 4693 | N   | GLU B 182 | -0.886 | 63.518 | 82.288 | 1.00 17.38 | N |
| ATOM | 4694 | CA  | GLU B 182 | -0.569 | 63.554 | 83.711 | 1.00 18.33 | C |
| ATOM | 4695 | C   | GLU B 182 | -0.408 | 64.951 | 84.291 | 1.00 17.75 | C |
| ATOM | 4696 | O   | GLU B 182 | -0.024 | 65.899 | 83.583 | 1.00 16.85 | O |
| ATOM | 4697 | CB  | GLU B 182 | 0.696 | 62.736 | 83.958 | 1.00 17.99 | C |
| ATOM | 4698 | CG  | GLU B 182 | 1.874 | 63.464 | 83.393 | 1.00 18.75 | C |
| ATOM | 4699 | CD  | GLU B 182 | 2.884 | 62.538 | 82.746 | 1.00 23.34 | C |
| ATOM | 4700 | OE1 | GLU B 182 | 2.587 | 61.328 | 82.542 | 1.00 23.02 | O |
| ATOM | 4701 | OE2 | GLU B 182 | 3.993 | 63.043 | 82.436 | 1.00 23.24 | O |
| ATOM | 4702 | N   | ASP B 183 | -0.647 | 65.037 | 85.602 | 1.00 17.92 | N |
| ATOM | 4703 | CA  | ASP B 183 | -0.619 | 66.300 | 86.328 | 1.00 17.64 | C |
| ATOM | 4704 | C   | ASP B 183 | 0.727 | 66.815 | 86.768 | 1.00 18.48 | C |
| ATOM | 4705 | O   | ASP B 183 | 0.895 | 67.288 | 87.899 | 1.00 18.38 | O |
| ATOM | 4706 | CB  | ASP B 183 | -1.591 | 66.279 | 87.513 | 1.00 16.53 | C |
| ATOM | 4707 | CG  | ASP B 183 | -1.389 | 65.108 | 88.491 | 1.00 21.33 | C |
| ATOM | 4708 | OD1 | ASP B 183 | -0.395 | 64.319 | 88.390 | 1.00 18.70 | O |
| ATOM | 4709 | OD2 | ASP B 183 | -2.265 | 65.003 | 89.416 | 1.00 19.79 | O |
| ATOM | 4710 | N   | GLN B 184 | 1.681 | 66.766 | 85.842 | 1.00 18.31 | N |
| ATOM | 4711 | CA  | GLN B 184 | 3.034 | 67.252 | 86.131 | 1.00 17.15 | C |
| ATOM | 4712 | C   | GLN B 184 | 3.326 | 68.504 | 85.309 | 1.00 17.26 | C |
| ATOM | 4713 | O   | GLN B 184 | 2.684 | 68.747 | 84.300 | 1.00 17.24 | O |

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ATOM   4714  CB  GLN B 184       4.046  66.208  85.716  1.00 17.32           C
ATOM   4715  CG  GLN B 184       4.007  64.888  86.515  1.00 18.19           C
ATOM   4716  CD  GLN B 184       5.211  64.024  86.150  1.00 19.97           C
ATOM   4717  OE1 GLN B 184       6.340  64.527  86.101  1.00 18.66           O
ATOM   4718  NE2 GLN B 184       4.980  62.726  85.893  1.00 17.37           N
ATOM   4719  N   LEU B 185       4.348  69.251  85.730  1.00 17.75           N
ATOM   4720  CA  LEU B 185       4.826  70.462  85.013  1.00 18.03           C
ATOM   4721  C   LEU B 185       5.584  69.947  83.795  1.00 19.04           C
ATOM   4722  O   LEU B 185       6.563  69.235  83.986  1.00 18.00           O
ATOM   4723  CB  LEU B 185       5.794  71.229  85.927  1.00 15.27           C
ATOM   4724  CG  LEU B 185       6.499  72.438  85.292  1.00 17.68           C
ATOM   4725  CD1 LEU B 185       5.405  73.431  84.807  1.00 15.98           C
ATOM   4726  CD2 LEU B 185       7.485  73.106  86.324  1.00 17.99           C
ATOM   4727  N   ALA B 186       5.190  70.311  82.560  1.00 19.41           N
ATOM   4728  CA  ALA B 186       5.878  69.748  81.376  1.00 20.86           C
ATOM   4729  C   ALA B 186       7.404  69.937  81.351  1.00 20.44           C
ATOM   4730  O   ALA B 186       8.184  69.015  81.038  1.00 18.72           O
ATOM   4731  CB  ALA B 186       5.260  70.302  80.060  1.00 19.26           C
ATOM   4732  N   SER B 187       7.833  71.121  81.671  1.00 18.44           N
ATOM   4733  CA  SER B 187       9.247  71.436  81.717  1.00 19.23           C
ATOM   4734  C   SER B 187      10.092  70.653  82.729  1.00 20.64           C
ATOM   4735  O   SER B 187      11.319  70.684  82.643  1.00 19.56           O
ATOM   4736  CB  SER B 187       9.424  72.946  81.903  1.00 18.30           C
ATOM   4737  OG  SER B 187       8.956  73.337  83.163  1.00 17.22           O
ATOM   4738  N   GLU B 188       9.440  69.977  83.683  1.00 18.52           N
ATOM   4739  CA  GLU B 188      10.146  69.149  84.669  1.00 19.69           C
ATOM   4740  C   GLU B 188       9.554  67.732  84.677  1.00 18.46           C
ATOM   4741  O   GLU B 188       9.741  66.980  85.642  1.00 16.19           O
ATOM   4742  CB  GLU B 188      10.009  69.729  86.076  1.00 22.39           C
ATOM   4743  CG  GLU B 188      10.708  71.063  86.295  1.00 24.71           C
ATOM   4744  CD  GLU B 188      12.169  71.001  85.886  1.00 26.11           C
ATOM   4745  OE1 GLU B 188      12.757  69.894  85.990  1.00 28.17           O
ATOM   4746  OE2 GLU B 188      12.710  72.046  85.449  1.00 27.60           O
ATOM   4747  N   LYS B 189       8.853  67.364  83.605  1.00 18.88           N
ATOM   4748  CA  LYS B 189       8.212  66.032  83.540  1.00 18.64           C
ATOM   4749  C   LYS B 189       9.164  64.897  83.883  1.00 20.25           C
ATOM   4750  O   LYS B 189      10.330  64.899  83.448  1.00 16.65           O
ATOM   4751  CB  LYS B 189       7.646  65.741  82.139  1.00 18.74           C
ATOM   4752  CG  LYS B 189       6.892  64.381  81.981  1.00 20.96           C
ATOM   4753  CD  LYS B 189       7.776  63.221  81.551  1.00 21.55           C
ATOM   4754  CE  LYS B 189       6.967  62.013  81.006  1.00 21.10           C
ATOM   4755  NZ  LYS B 189       6.082  61.323  82.010  1.00 21.67           N
ATOM   4756  N   LYS B 190       8.644  63.909  84.606  1.00 17.82           N
ATOM   4757  CA  LYS B 190       9.447  62.735  84.979  1.00 19.15           C
ATOM   4758  C   LYS B 190       8.664  61.433  84.771  1.00 20.42           C
ATOM   4759  O   LYS B 190       7.456  61.427  84.803  1.00 20.04           O
ATOM   4760  CB  LYS B 190       9.787  62.749  86.469  1.00 18.74           C
ATOM   4761  CG  LYS B 190      10.660  63.908  86.944  1.00 17.46           C
ATOM   4762  CD  LYS B 190      12.009  63.843  86.299  1.00 15.96           C
ATOM   4763  CE  LYS B 190      12.902  64.935  86.903  1.00 16.52           C
ATOM   4764  NZ  LYS B 190      12.241  66.259  86.681  1.00 18.12           N
ATOM   4765  N   CYS B 191       9.387  60.347  84.551  1.00 19.18           N
ATOM   4766  CA  CYS B 191       8.784  59.007  84.544  1.00 17.53           C
ATOM   4767  C   CYS B 191       8.117  58.953  85.953  1.00 18.61           C
ATOM   4768  O   CYS B 191       8.636  59.544  86.898  1.00 17.70           O
ATOM   4769  CB  CYS B 191       9.926  57.977  84.484  1.00 17.55           C
ATOM   4770  SG  CYS B 191       9.558  56.289  85.158  1.00 18.35           S
ATOM   4771  N   GLY B 192       6.971  58.275  86.094  1.00 20.25           N
ATOM   4772  CA  GLY B 192       6.304  58.204  87.400  1.00 20.11           C
ATOM   4773  C   GLY B 192       7.172  57.593  88.488  1.00 19.97           C
ATOM   4774  O   GLY B 192       6.992  57.840  89.671  1.00 20.51           O
ATOM   4775  N   HIS B 193       8.160  56.817  88.084  1.00 19.68           N
ATOM   4776  CA  HIS B 193       9.031  56.191  89.058  1.00 22.12           C
ATOM   4777  C   HIS B 193      10.403  56.806  89.248  1.00 22.60           C
ATOM   4778  O   HIS B 193      11.298  56.185  89.840  1.00 22.32           O
ATOM   4779  CB  HIS B 193       9.091  54.699  88.757  1.00 22.07           C
ATOM   4780  CG  HIS B 193       7.732  54.078  88.780  1.00 22.58           C
ATOM   4781  ND1 HIS B 193       7.109  53.602  87.649  1.00 24.41           N
ATOM   4782  CD2 HIS B 193       6.818  53.997  89.774  1.00 24.63           C
ATOM   4783  CE1 HIS B 193·      5.867  53.257  87.941  1.00 26.00           C
ATOM   4784  NE2 HIS B 193       5.663  53.488  89.225  1.00 25.63           N
ATOM   4785  N   LEU B 194      10.567  58.031  88.735  1.00 21.89           N
ATOM   4786  CA  LEU B 194      11.815  58.774  88.910  1.00 21.12           C
ATOM   4787  C   LEU B 194      11.499  59.852  89.968  1.00 20.84           C
ATOM   4788  O   LEU B 194      10.334  60.147  90.226  1.00 21.78           O
ATOM   4789  CB  LEU B 194      12.222  59.425  87.583  1.00 19.87           C
ATOM   4790  CG  LEU B 194      12.893  58.512  86.561  1.00 20.66           C
ATOM   4791  CD1 LEU B 194      13.091  59.303  85.262  1.00 19.60           C
ATOM   4792  CD2 LEU B 194      14.259  58.043  87.065  1.00 18.20           C
ATOM   4793  N   GLY B 195      12.512  60.409  90.599  1.00 19.39           N
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ATOM   4794  CA  GLY B 195      12.267  61.447  91.588  1.00 21.29       C
ATOM   4795  C   GLY B 195      12.248  62.795  90.864  1.00 19.35       C
ATOM   4796  O   GLY B 195      12.336  62.824  89.623  1.00 20.29       O
ATOM   4797  N   GLY B 196      12.096  63.885  91.612  1.00 19.97       N
ATOM   4798  CA  GLY B 196      12.117  65.224  91.023  1.00 20.04       C
ATOM   4799  C   GLY B 196      10.855  65.645  90.328  1.00 21.04       C
ATOM   4800  O   GLY B 196      10.883  66.506  89.436  1.00 20.69       O
ATOM   4801  N   LYS B 197       9.726  65.085  90.753  1.00 19.12       N
ATOM   4802  CA  LYS B 197       8.475  65.419  90.104  1.00 18.68       C
ATOM   4803  C   LYS B 197       7.861  66.705  90.653  1.00 18.12       C
ATOM   4804  O   LYS B 197       7.943  66.969  91.855  1.00 19.31       O
ATOM   4805  CB  LYS B 197       7.494  64.252  90.265  1.00 18.13       C
ATOM   4806  CG  LYS B 197       8.052  62.953  89.689  1.00 18.48       C
ATOM   4807  CD  LYS B 197       6.957  61.928  89.347  1.00 20.11       C
ATOM   4808  CE  LYS B 197       6.231  61.456  90.601  1.00 20.05       C
ATOM   4809  NZ  LYS B 197       5.319  60.309  90.255  1.00 20.19       N
ATOM   4810  N   VAL B 198       7.243  67.479  89.774  1.00 18.02       N
ATOM   4811  CA  VAL B 198       6.585  68.711  90.172  1.00 17.01       C
ATOM   4812  C   VAL B 198       5.142  68.689  89.646  1.00 16.62       C
ATOM   4813  O   VAL B 198       4.915  68.682  88.442  1.00 16.68       O
ATOM   4814  CB  VAL B 198       7.308  69.944  89.594  1.00 18.29       C
ATOM   4815  CG1 VAL B 198       6.618  71.228  90.075  1.00 18.61       C
ATOM   4816  CG2 VAL B 198       8.774  69.922  90.033  1.00 20.00       C
ATOM   4817  N   LEU B 199       4.168  68.665  90.556  1.00 16.92       N
ATOM   4818  CA  LEU B 199       2.766  68.664  90.135  1.00 16.81       C
ATOM   4819  C   LEU B 199       2.365  70.080  89.733  1.00 18.07       C
ATOM   4820  O   LEU B 199       3.033  71.053  90.113  1.00 18.64       O
ATOM   4821  CB  LEU B 199       1.842  68.244  91.311  1.00 15.78       C
ATOM   4822  CG  LEU B 199       2.048  66.915  92.043  1.00 17.64       C
ATOM   4823  CD1 LEU B 199       1.147  66.875  93.299  1.00 16.28       C
ATOM   4824  CD2 LEU B 199       1.694  65.732  91.106  1.00 16.75       C
ATOM   4825  N   ILE B 200       1.252  70.193  89.005  1.00 18.24       N
ATOM   4826  CA  ILE B 200       0.692  71.487  88.654  1.00 19.79       C
ATOM   4827  C   ILE B 200      -0.677  71.495  89.408  1.00 20.19       C
ATOM   4828  O   ILE B 200      -1.136  70.433  89.861  1.00 19.18       O
ATOM   4829  CB  ILE B 200       0.484  71.623  87.129  1.00 21.52       C
ATOM   4830  CG1 ILE B 200       0.092  70.270  86.519  1.00 24.12       C
ATOM   4831  CG2 ILE B 200       1.758  72.108  86.479  1.00 21.16       C
ATOM   4832  CD1 ILE B 200      -1.290  70.206  86.002  1.00 22.13       C
ATOM   4833  N   PRO B 201      -1.301  72.676  89.592  1.00 20.24       N
ATOM   4834  CA  PRO B 201      -2.600  72.782  90.295  1.00 21.90       C
ATOM   4835  C   PRO B 201      -3.686  71.860  89.717  1.00 22.27       C
ATOM   4836  O   PRO B 201      -3.774  71.641  88.499  1.00 22.91       O
ATOM   4837  CB  PRO B 201      -2.988  74.248  90.122  1.00 20.39       C
ATOM   4838  CG  PRO B 201      -1.643  74.949  89.933  1.00 22.65       C
ATOM   4839  CD  PRO B 201      -0.881  73.980  89.056  1.00 21.01       C
ATOM   4840  N   THR B 202      -4.512  71.318  90.601  1.00 23.32       N
ATOM   4841  CA  THR B 202      -5.597  70.417  90.214  1.00 21.12       C
ATOM   4842  C   THR B 202      -6.377  71.013  89.031  1.00 21.48       C
ATOM   4843  O   THR B 202      -6.659  70.332  88.044  1.00 22.26       O
ATOM   4844  CB  THR B 202      -6.530  70.192  91.420  1.00 21.68       C
ATOM   4845  OG1 THR B 202      -5.860  69.347  92.364  1.00 21.41       O
ATOM   4846  CG2 THR B 202      -7.869  69.544  91.008  1.00 21.55       C
ATOM   4847  N   GLN B 203      -6.684  72.296  89.099  1.00 21.13       N
ATOM   4848  CA  GLN B 203      -7.449  72.913  88.028  1.00 20.80       C
ATOM   4849  C   GLN B 203      -6.721  72.928  86.702  1.00 21.73       C
ATOM   4850  O   GLN B 203      -7.334  72.728  85.626  1.00 21.81       O
ATOM   4851  CB  GLN B 203      -7.850  74.322  88.398  1.00 20.91       C
ATOM   4852  CG  GLN B 203      -8.861  74.939  87.426  1.00 24.55       C
ATOM   4853  CD  GLN B 203     -10.195  74.182  87.357  1.00 25.54       C
ATOM   4854  OE1 GLN B 203     -10.702  73.682  88.361  1.00 27.02       O
ATOM   4855  NE2 GLN B 203     -10.781  74.128  86.161  1.00 27.97       N
ATOM   4856  N   GLN B 204      -5.418  73.173  86.753  1.00 19.67       N
ATOM   4857  CA  GLN B 204      -4.658  73.175  85.521  1.00 20.33       C
ATOM   4858  C   GLN B 204      -4.786  71.818  84.852  1.00 19.48       C
ATOM   4859  O   GLN B 204      -4.965  71.745  83.648  1.00 21.67       O
ATOM   4860  CB  GLN B 204      -3.181  73.498  85.804  1.00 19.54       C
ATOM   4861  CG  GLN B 204      -2.346  73.705  84.563  1.00 19.20       C
ATOM   4862  CD  GLN B 204      -0.988  74.334  84.893  1.00 20.90       C
ATOM   4863  OE1 GLN B 204      -0.871  75.108  85.842  1.00 20.86       O
ATOM   4864  NE2 GLN B 204       0.024  74.020  84.102  1.00 22.00       N
ATOM   4865  N   HIS B 205      -4.718  70.733  85.617  1.00 19.80       N
ATOM   4866  CA  HIS B 205      -4.849  69.446  84.958  1.00 21.60       C
ATOM   4867  C   HIS B 205      -6.248  69.316  84.408  1.00 20.41       C
ATOM   4868  O   HIS B 205      -6.427  68.717  83.379  1.00 20.37       O
ATOM   4869  CB  HIS B 205      -4.534  68.232  85.846  1.00 19.73       C
ATOM   4870  CG  HIS B 205      -4.113  67.036  85.035  1.00 20.80       C
ATOM   4871  ND1 HIS B 205      -4.627  65.771  85.220  1.00 22.99       N
ATOM   4872  CD2 HIS B 205      -3.288  66.949  83.967  1.00 19.83       C
ATOM   4873  CE1 HIS B 205      -4.138  64.955  84.298  1.00 19.91       C
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ATOM   4874  NE2 HIS B 205      -3.328  65.647  83.522  1.00 22.41           N
ATOM   4875  N   ILE B 206      -7.249  69.893  85.073  1.00 21.82           N
ATOM   4876  CA  ILE B 206      -8.599  69.828  84.530  1.00 21.62           C
ATOM   4877  C   ILE B 206      -8.614  70.587  83.173  1.00 22.05           C
ATOM   4878  O   ILE B 206      -9.298  70.181  82.209  1.00 22.15           O
ATOM   4879  CB  ILE B 206      -9.637  70.408  85.584  1.00 22.60           C
ATOM   4880  CG1 ILE B 206      -9.799  69.402  86.724  1.00 24.14           C
ATOM   4881  CG2 ILE B 206     -10.981  70.734  84.901  1.00 22.38           C
ATOM   4882  CD1 ILE B 206     -10.566  69.926  87.946  1.00 24.82           C
ATOM   4883  N   ARG B 207      -7.849  71.678  83.073  1.00 20.87           N
ATOM   4884  CA  ARG B 207      -7.778  72.394  81.806  1.00 20.97           C
ATOM   4885  C   ARG B 207      -7.147  71.481  80.722  1.00 20.54           C
ATOM   4886  O   ARG B 207      -7.558  71.501  79.558  1.00 21.29           O
ATOM   4887  CB  ARG B 207      -6.949  73.676  81.927  1.00 24.21           C
ATOM   4888  CG  ARG B 207      -7.683  74.837  82.585  1.00 26.66           C
ATOM   4889  CD  ARG B 207      -7.043  76.165  82.275  1.00 30.47           C
ATOM   4890  NE  ARG B 207      -5.737  76.335  82.916  1.00 32.73           N
ATOM   4891  CZ  ARG B 207      -5.532  76.533  84.217  1.00 32.94           C
ATOM   4892  NH1 ARG B 207      -6.545  76.590  85.059  1.00 34.62           N
ATOM   4893  NH2 ARG B 207      -4.300  76.692  84.681  1.00 32.65           N
ATOM   4894  N   THR B 208      -6.190  70.661  81.132  1.00 18.96           N
ATOM   4895  CA  THR B 208      -5.541  69.746  80.196  1.00 17.73           C
ATOM   4896  C   THR B 208      -6.523  68.671  79.732  1.00 18.67           C
ATOM   4897  O   THR B 208      -6.658  68.416  78.542  1.00 19.13           O
ATOM   4898  CB  THR B 208      -4.354  69.090  80.872  1.00 19.53           C
ATOM   4899  OG1 THR B 208      -3.329  70.080  81.034  1.00 19.28           O
ATOM   4900  CG2 THR B 208      -3.882  67.863  80.073  1.00 18.42           C
ATOM   4901  N   LEU B 209      -7.189  68.028  80.679  1.00 18.74           N
ATOM   4902  CA  LEU B 209      -8.166  66.995  80.332  1.00 19.91           C
ATOM   4903  C   LEU B 209      -9.285  67.556  79.446  1.00 20.66           C
ATOM   4904  O   LEU B 209      -9.806  66.863  78.567  1.00 19.06           O
ATOM   4905  CB  LEU B 209      -8.749  66.370  81.613  1.00 21.18           C
ATOM   4906  CG  LEU B 209      -7.720  65.638  82.496  1.00 21.09           C
ATOM   4907  CD1 LEU B 209      -8.388  65.160  83.804  1.00 20.86           C
ATOM   4908  CD2 LEU B 209      -7.119  64.473  81.712  1.00 20.45           C
ATOM   4909  N   THR B 210      -9.648  68.805  79.697  1.00 19.66           N
ATOM   4910  CA  THR B 210     -10.673  69.526  78.958  1.00 20.11           C
ATOM   4911  C   THR B 210     -10.206  69.788  77.520  1.00 19.97           C
ATOM   4912  O   THR B 210     -10.936  69.559  76.547  1.00 16.93           O
ATOM   4913  CB  THR B 210     -10.997  70.845  79.723  1.00 22.35           C
ATOM   4914  OG1 THR B 210     -11.804  70.514  80.871  1.00 21.45           O
ATOM   4915  CG2 THR B 210     -11.691  71.870  78.848  1.00 20.42           C
ATOM   4916  N   SER B 211      -8.959  70.218  77.393  1.00 19.11           N
ATOM   4917  CA  SER B 211      -8.357  70.482  76.090  1.00 18.79           C
ATOM   4918  C   SER B 211      -8.259  69.196  75.249  1.00 17.23           C
ATOM   4919  O   SER B 211      -8.436  69.216  74.028  1.00 19.67           O
ATOM   4920  CB  SER B 211      -6.949  71.068  76.285  1.00 18.30           C
ATOM   4921  OG  SER B 211      -6.385  71.473  75.023  1.00 19.68           O
ATOM   4922  N   ALA B 212      -7.958  68.088  75.902  1.00 18.20           N
ATOM   4923  CA  ALA B 212      -7.818  66.811  75.206  1.00 16.88           C
ATOM   4924  C   ALA B 212      -9.197  66.326  74.694  1.00 20.29           C
ATOM   4925  O   ALA B 212      -9.317  65.778  73.587  1.00 18.64           O
ATOM   4926  CB  ALA B 212      -7.211  65.788  76.132  1.00 19.77           C
ATOM   4927  N   ARG B 213     -10.233  66.503  75.506  1.00 19.12           N
ATOM   4928  CA  ARG B 213     -11.550  66.089  75.057  1.00 21.51           C
ATOM   4929  C   ARG B 213     -11.965  67.040  73.922  1.00 21.55           C
ATOM   4930  O   ARG B 213     -12.595  66.617  72.936  1.00 24.16           O
ATOM   4931  CB  ARG B 213     -12.584  66.157  76.195  1.00 23.68           C
ATOM   4932  CG  ARG B 213     -13.992  65.679  75.768  1.00 23.66           C
ATOM   4933  CD  ARG B 213     -14.069  64.193  75.776  1.00 25.72           C
ATOM   4934  NE  ARG B 213     -13.953  63.722  77.163  1.00 28.56           N
ATOM   4935  CZ  ARG B 213     -13.725  62.461  77.507  1.00 30.83           C
ATOM   4936  NH1 ARG B 213     -13.583  61.502  76.562  1.00 26.40           N
ATOM   4937  NH2 ARG B 213     -13.621  62.159  78.804  1.00 30.92           N
ATOM   4938  N   LEU B 214     -11.605  68.314  74.043  1.00 22.39           N
ATOM   4939  CA  LEU B 214     -11.991  69.277  73.020  1.00 21.13           C
ATOM   4940  C   LEU B 214     -11.369  68.921  71.669  1.00 21.54           C
ATOM   4941  O   LEU B 214     -12.048  68.927  70.646  1.00 20.91           O
ATOM   4942  CB  LEU B 214     -11.597  70.682  73.413  1.00 19.49           C
ATOM   4943  CG  LEU B 214     -11.949  71.754  72.382  1.00 20.34           C
ATOM   4944  CD1 LEU B 214     -13.461  71.871  72.220  1.00 21.36           C
ATOM   4945  CD2 LEU B 214     -11.370  73.069  72.815  1.00 21.96           C
ATOM   4946  N   ALA B 215     -10.079  68.592  71.651  1.00 20.76           N
ATOM   4947  CA  ALA B 215      -9.457  68.229  70.382  1.00 21.75           C
ATOM   4948  C   ALA B 215     -10.168  66.986  69.826  1.00 18.26           C
ATOM   4949  O   ALA B 215     -10.430  66.892  68.627  1.00 20.80           O
ATOM   4950  CB  ALA B 215      -7.895  67.977  70.575  1.00 19.51           C
ATOM   4951  N   ALA B 216     -10.488  66.028  70.691  1.00 21.45           N
ATOM   4952  CA  ALA B 216     -11.213  64.820  70.267  1.00 20.97           C
ATOM   4953  C   ALA B 216     -12.581  65.191  69.649  1.00 21.91           C
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| ATOM | 4954 | O | ALA | B | 216 | -12.945 | 64.681 | 68.582 | 1.00 | 21.11 | O |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 4955 | CB | ALA | B | 216 | -11.410 | 63.856 | 71.456 | 1.00 | 19.94 | C |
| ATOM | 4956 | N | ASP | B | 217 | -13.334 | 66.070 | 70.314 | 1.00 | 22.13 | N |
| ATOM | 4957 | CA | ASP | B | 217 | -14.652 | 66.472 | 69.781 | 1.00 | 21.95 | C |
| ATOM | 4958 | C | ASP | B | 217 | -14.503 | 67.234 | 68.460 | 1.00 | 22.63 | C |
| ATOM | 4959 | O | ASP | B | 217 | -15.256 | 66.966 | 67.519 | 1.00 | 23.97 | O |
| ATOM | 4960 | CB | ASP | B | 217 | -15.450 | 67.337 | 70.791 | 1.00 | 20.89 | C |
| ATOM | 4961 | CG | ASP | B | 217 | -15.903 | 66.563 | 71.993 | 1.00 | 23.07 | C |
| ATOM | 4962 | OD1 | ASP | B | 217 | -16.059 | 65.329 | 71.898 | 1.00 | 24.34 | O |
| ATOM | 4963 | OD2 | ASP | B | 217 | -16.105 | 67.182 | 73.061 | 1.00 | 23.95 | O |
| ATOM | 4964 | N | VAL | B | 218 | -13.551 | 68.167 | 68.358 | 1.00 | 20.94 | N |
| ATOM | 4965 | CA | VAL | B | 218 | -13.381 | 68.904 | 67.103 | 1.00 | 20.62 | C |
| ATOM | 4966 | C | VAL | B | 218 | -12.984 | 67.951 | 65.954 | 1.00 | 21.57 | C |
| ATOM | 4967 | O | VAL | B | 218 | -13.314 | 68.192 | 64.775 | 1.00 | 23.63 | O |
| ATOM | 4968 | CB | VAL | B | 218 | -12.313 | 70.030 | 67.228 | 1.00 | 19.81 | C |
| ATOM | 4969 | CG1 | VAL | B | 218 | -12.014 | 70.648 | 65.869 | 1.00 | 19.49 | C |
| ATOM | 4970 | CG2 | VAL | B | 218 | -12.783 | 71.079 | 68.193 | 1.00 | 20.99 | C |
| ATOM | 4971 | N | ALA | B | 219 | -12.312 | 66.853 | 66.288 | 1.00 | 22.09 | N |
| ATOM | 4972 | CA | ALA | B | 219 | -11.899 | 65.897 | 65.252 | 1.00 | 22.17 | C |
| ATOM | 4973 | C | ALA | B | 219 | -12.990 | 64.825 | 65.078 | 1.00 | 23.47 | C |
| ATOM | 4974 | O | ALA | B | 219 | -12.817 | 63.852 | 64.334 | 1.00 | 24.15 | O |
| ATOM | 4975 | CB | ALA | B | 219 | -10.538 | 65.244 | 65.623 | 1.00 | 21.22 | C |
| ATOM | 4976 | N | ASP | B | 220 | -14.106 | 64.995 | 65.785 | 1.00 | 24.39 | N |
| ATOM | 4977 | CA | ASP | B | 220 | -15.241 | 64.083 | 65.648 | 1.00 | 23.63 | C |
| ATOM | 4978 | C | ASP | B | 220 | -15.015 | 62.609 | 65.984 | 1.00 | 24.78 | C |
| ATOM | 4979 | O | ASP | B | 220 | -15.625 | 61.723 | 65.363 | 1.00 | 24.22 | O |
| ATOM | 4980 | CB | ASP | B | 220 | -15.787 | 64.199 | 64.223 | 1.00 | 26.09 | C |
| ATOM | 4981 | CG | ASP | B | 220 | -17.224 | 63.689 | 64.088 | 1.00 | 28.37 | C |
| ATOM | 4982 | OD1 | ASP | B | 220 | -18.004 | 63.767 | 65.070 | 1.00 | 27.54 | O |
| ATOM | 4983 | OD2 | ASP | B | 220 | -17.566 | 63.222 | 62.978 | 1.00 | 31.49 | O |
| ATOM | 4984 | N | VAL | B | 221 | -14.160 | 62.337 | 66.964 | 1.00 | 22.91 | N |
| ATOM | 4985 | CA | VAL | B | 221 | -13.922 | 60.964 | 67.375 | 1.00 | 24.11 | C |
| ATOM | 4986 | C | VAL | B | 221 | -14.026 | 60.843 | 68.892 | 1.00 | 22.78 | C |
| ATOM | 4987 | O | VAL | B | 221 | -13.620 | 61.728 | 69.618 | 1.00 | 23.60 | O |
| ATOM | 4988 | CB | VAL | B | 221 | -12.554 | 60.479 | 66.876 | 1.00 | 23.58 | C |
| ATOM | 4989 | CG1 | VAL | B | 221 | -12.575 | 60.417 | 65.351 | 1.00 | 23.03 | C |
| ATOM | 4990 | CG2 | VAL | B | 221 | -11.467 | 61.454 | 67.349 | 1.00 | 24.45 | C |
| ATOM | 4991 | N | PRO | B | 222 | -14.587 | 59.723 | 69.380 | 1.00 | 22.05 | N |
| ATOM | 4992 | CA | PRO | B | 222 | -14.798 | 59.408 | 70.803 | 1.00 | 21.07 | C |
| ATOM | 4993 | C | PRO | B | 222 | -13.586 | 58.890 | 71.558 | 1.00 | 20.02 | C |
| ATOM | 4994 | O | PRO | B | 222 | -13.708 | 57.937 | 72.318 | 1.00 | 20.50 | O |
| ATOM | 4995 | CB | PRO | B | 222 | -15.927 | 58.361 | 70.753 | 1.00 | 19.86 | C |
| ATOM | 4996 | CG | PRO | B | 222 | -15.610 | 57.632 | 69.473 | 1.00 | 20.43 | C |
| ATOM | 4997 | CD | PRO | B | 222 | -15.227 | 58.718 | 68.504 | 1.00 | 20.02 | C |
| ATOM | 4998 | N | THR | B | 223 | -12.426 | 59.536 | 71.367 | 1.00 | 20.07 | N |
| ATOM | 4999 | CA | THR | B | 223 | -11.176 | 59.106 | 72.016 | 1.00 | 20.73 | C |
| ATOM | 5000 | C | THR | B | 223 | -11.288 | 58.846 | 73.537 | 1.00 | 20.86 | C |
| ATOM | 5001 | O | THR | B | 223 | -11.930 | 59.601 | 74.276 | 1.00 | 20.68 | O |
| ATOM | 5002 | CB | THR | B | 223 | -10.077 | 60.170 | 71.722 | 1.00 | 20.99 | C |
| ATOM | 5003 | OG1 | THR | B | 223 | -10.149 | 60.535 | 70.330 | 1.00 | 18.79 | O |
| ATOM | 5004 | CG2 | THR | B | 223 | -8.672 | 59.631 | 72.066 | 1.00 | 21.72 | C |
| ATOM | 5005 | N | VAL | B | 224 | -10.675 | 57.762 | 74.009 | 1.00 | 20.82 | N |
| ATOM | 5006 | CA | VAL | B | 224 | -10.708 | 57.443 | 75.437 | 1.00 | 20.41 | C |
| ATOM | 5007 | C | VAL | B | 224 | -9.645 | 58.371 | 76.090 | 1.00 | 23.04 | C |
| ATOM | 5008 | O | VAL | B | 224 | -8.456 | 58.340 | 75.704 | 1.00 | 23.13 | O |
| ATOM | 5009 | CB | VAL | B | 224 | -10.387 | 55.912 | 75.668 | 1.00 | 19.63 | C |
| ATOM | 5010 | CG1 | VAL | B | 224 | -10.361 | 55.595 | 77.122 | 1.00 | 16.79 | C |
| ATOM | 5011 | CG2 | VAL | B | 224 | -11.481 | 55.053 | 75.023 | 1.00 | 16.84 | C |
| ATOM | 5012 | N | VAL | B | 225 | -10.086 | 59.222 | 77.025 | 1.00 | 20.89 | N |
| ATOM | 5013 | CA | VAL | B | 225 | -9.197 | 60.154 | 77.716 | 1.00 | 21.12 | C |
| ATOM | 5014 | C | VAL | B | 225 | -8.828 | 59.614 | 79.097 | 1.00 | 20.88 | C |
| ATOM | 5015 | O | VAL | B | 225 | -9.702 | 59.363 | 79.919 | 1.00 | 21.19 | O |
| ATOM | 5016 | CB | VAL | B | 225 | -9.891 | 61.524 | 77.872 | 1.00 | 20.06 | C |
| ATOM | 5017 | CG1 | VAL | B | 225 | -9.041 | 62.468 | 78.751 | 1.00 | 20.28 | C |
| ATOM | 5018 | CG2 | VAL | B | 225 | -10.140 | 62.107 | 76.509 | 1.00 | 22.12 | C |
| ATOM | 5019 | N | ILE | B | 226 | -7.527 | 59.459 | 79.360 | 1.00 | 20.78 | N |
| ATOM | 5020 | CA | ILE | B | 226 | -7.065 | 58.930 | 80.616 | 1.00 | 19.59 | C |
| ATOM | 5021 | C | ILE | B | 226 | -6.315 | 59.982 | 81.432 | 1.00 | 21.28 | C |
| ATOM | 5022 | O | ILE | B | 226 | -5.396 | 60.649 | 80.911 | 1.00 | 18.97 | O |
| ATOM | 5023 | CB | ILE | B | 226 | -6.170 | 57.715 | 80.356 | 1.00 | 18.22 | C |
| ATOM | 5024 | CG1 | ILE | B | 226 | -6.978 | 56.665 | 79.556 | 1.00 | 19.36 | C |
| ATOM | 5025 | CG2 | ILE | B | 226 | -5.656 | 57.147 | 81.654 | 1.00 | 19.71 | C |
| ATOM | 5026 | CD1 | ILE | B | 226 | -6.187 | 55.454 | 79.103 | 1.00 | 22.94 | C |
| ATOM | 5027 | N | ALA | B | 227 | -6.712 | 60.131 | 82.705 | 1.00 | 20.61 | N |
| ATOM | 5028 | CA | ALA | B | 227 | -6.069 | 61.116 | 83.589 | 1.00 | 22.28 | C |
| ATOM | 5029 | C | ALA | B | 227 | -5.169 | 60.356 | 84.531 | 1.00 | 21.80 | C |
| ATOM | 5030 | O | ALA | B | 227 | -5.590 | 59.383 | 85.162 | 1.00 | 22.80 | O |
| ATOM | 5031 | CB | ALA | B | 227 | -7.115 | 61.907 | 84.395 | 1.00 | 22.49 | C |
| ATOM | 5032 | N | ARG | B | 228 | -3.914 | 60.795 | 84.617 | 1.00 | 20.68 | N |
| ATOM | 5033 | CA | ARG | B | 228 | -2.968 | 60.173 | 85.497 | 1.00 | 19.12 | C |

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ATOM   5034  C    ARG B 228     -2.518  61.160  86.565  1.00 19.69           C
ATOM   5035  O    ARG B 228     -2.271  62.308  86.242  1.00 23.24           O
ATOM   5036  CB   ARG B 228     -1.739  59.725  84.706  1.00 18.62           C
ATOM   5037  CG   ARG B 228     -0.497  59.542  85.534  1.00 19.12           C
ATOM   5038  CD   ARG B 228      0.684  59.095  84.658  1.00 19.86           C
ATOM   5039  NE   ARG B 228      1.965  59.459  85.267  1.00 20.88           N
ATOM   5040  CZ   ARG B 228      3.160  59.075  84.827  1.00 21.67           C
ATOM   5041  NH1  ARG B 228      3.273  58.290  83.780  1.00 20.38           N
ATOM   5042  NH2  ARG B 228      4.263  59.529  85.406  1.00 19.46           N
ATOM   5043  N    THR B 229     -2.408  60.723  87.823  1.00 18.99           N
ATOM   5044  CA   THR B 229     -1.881  61.607  88.863  1.00 17.59           C
ATOM   5045  C    THR B 229     -0.555  61.077  89.378  1.00 18.28           C
ATOM   5046  O    THR B 229     -0.366  59.864  89.556  1.00 16.78           O
ATOM   5047  CB   THR B 229     -2.814  61.818  90.060  1.00 18.84           C
ATOM   5048  OG1  THR B 229     -2.142  62.678  91.015  1.00 17.28           O
ATOM   5049  CG2  THR B 229     -3.134  60.494  90.739  1.00 19.16           C
ATOM   5050  N    ASP B 230      0.382  62.001  89.578  1.00 17.94           N
ATOM   5051  CA   ASP B 230      1.699  61.684  90.075  1.00 17.80           C
ATOM   5052  C    ASP B 230      1.910  62.126  91.517  1.00 19.89           C
ATOM   5053  O    ASP B 230      3.046  62.268  91.978  1.00 20.61           O
ATOM   5054  CB   ASP B 230      2.732  62.344  89.179  1.00 17.48           C
ATOM   5055  CG   ASP B 230      2.958  61.549  87.907  1.00 14.33           C
ATOM   5056  OD1  ASP B 230      3.766  60.601  87.928  1.00 18.05           O
ATOM   5057  OD2  ASP B 230      2.313  61.863  86.910  1.00 18.33           O
ATOM   5058  N    ALA B 231      0.814  62.295  92.237  1.00 20.64           N
ATOM   5059  CA   ALA B 231      0.876  62.789  93.604  1.00 21.30           C
ATOM   5060  C    ALA B 231      1.293  61.829  94.706  1.00 21.94           C
ATOM   5061  O    ALA B 231      1.538  62.254  95.842  1.00 20.96           O
ATOM   5062  CB   ALA B 231     -0.478  63.446  93.947  1.00 21.34           C
ATOM   5063  N    GLU B 232      1.370  60.544  94.399  1.00 21.06           N
ATOM   5064  CA   GLU B 232      1.776  59.572  95.403  1.00 23.85           C
ATOM   5065  C    GLU B 232      3.239  59.814  95.816  1.00 23.81           C
ATOM   5066  O    GLU B 232      3.594  59.687  96.993  1.00 24.07           O
ATOM   5067  CB   GLU B 232      1.593  58.172  94.820  1.00 25.71           C
ATOM   5068  CG   GLU B 232      1.572  57.049  95.804  1.00 29.82           C
ATOM   5069  CD   GLU B 232      2.911  56.781  96.393  1.00 33.45           C
ATOM   5070  OE1  GLU B 232      3.923  56.704  95.636  1.00 33.93           O
ATOM   5071  OE2  GLU B 232      2.955  56.636  97.631  1.00 36.25           O
ATOM   5072  N    ALA B 233      4.088  60.183  94.858  1.00 21.53           N
ATOM   5073  CA   ALA B 233      5.487  60.443  95.178  1.00 20.92           C
ATOM   5074  C    ALA B 233      5.945  61.905  95.068  1.00 21.28           C
ATOM   5075  O    ALA B 233      6.956  62.256  95.697  1.00 22.70           O
ATOM   5076  CB   ALA B 233      6.412  59.585  94.301  1.00 18.97           C
ATOM   5077  N    ALA B 234      5.262  62.727  94.274  1.00 19.50           N
ATOM   5078  CA   ALA B 234      5.694  64.129  94.087  1.00 18.94           C
ATOM   5079  C    ALA B 234      5.607  64.949  95.377  1.00 20.93           C
ATOM   5080  O    ALA B 234      4.594  64.914  96.043  1.00 20.53           O
ATOM   5081  CB   ALA B 234      4.861  64.784  93.006  1.00 17.54           C
ATOM   5082  N    THR B 235      6.679  65.669  95.734  1.00 19.65           N
ATOM   5083  CA   THR B 235      6.644  66.505  96.915  1.00 20.07           C
ATOM   5084  C    THR B 235      6.757  67.991  96.561  1.00 20.69           C
ATOM   5085  O    THR B 235      7.011  68.814  97.438  1.00 23.61           O
ATOM   5086  CB   THR B 235      7.756  66.151  97.876  1.00 20.89           C
ATOM   5087  OG1  THR B 235      9.022  66.339  97.213  1.00 22.22           O
ATOM   5088  CG2  THR B 235      7.615  64.716  98.301  1.00 21.87           C
ATOM   5089  N    LEU B 236      6.547  68.325  95.289  1.00 18.40           N
ATOM   5090  CA   LEU B 236      6.598  69.709  94.822  1.00 19.26           C
ATOM   5091  C    LEU B 236      5.382  70.025  93.962  1.00 19.89           C
ATOM   5092  O    LEU B 236      4.838  69.139  93.292  1.00 20.51           O
ATOM   5093  CB   LEU B 236      7.880  69.964  93.996  1.00 19.05           C
ATOM   5094  CG   LEU B 236      9.200  69.825  94.767  1.00 19.18           C
ATOM   5095  CD1  LEU B 236     10.381  69.678  93.815  1.00 19.55           C
ATOM   5096  CD2  LEU B 236      9.336  70.997  95.711  1.00 21.24           C
ATOM   5097  N    ILE B 237      4.950  71.282  93.984  1.00 19.32           N
ATOM   5098  CA   ILE B 237      3.831  71.722  93.159  1.00 19.05           C
ATOM   5099  C    ILE B 237      4.216  73.135  92.758  1.00 20.25           C
ATOM   5100  O    ILE B 237      4.960  73.822  93.495  1.00 20.07           O
ATOM   5101  CB   ILE B 237      2.473  71.669  93.924  1.00 20.23           C
ATOM   5102  CG1  ILE B 237      1.323  72.077  92.990  1.00 17.33           C
ATOM   5103  CG2  ILE B 237      2.557  72.527  95.183  1.00 17.29           C
ATOM   5104  CD1  ILE B 237     -0.092  71.975  93.677  1.00 20.59           C
ATOM   5105  N    THR B 238      3.762  73.564  91.583  1.00 19.00           N
ATOM   5106  CA   THR B 238      4.152  74.872  91.050  1.00 17.98           C
ATOM   5107  C    THR B 238      3.473  76.045  91.730  1.00 19.05           C
ATOM   5108  O    THR B 238      4.014  77.142  91.736  1.00 19.46           O
ATOM   5109  CB   THR B 238      3.828  74.991  89.554  1.00 18.91           C
ATOM   5110  OG1  THR B 238      2.423  74.757  89.378  1.00 20.06           O
ATOM   5111  CG2  THR B 238      4.622  73.949  88.694  1.00 17.97           C
ATOM   5112  N    SER B 239      2.306  75.820  92.316  1.00 19.61           N
ATOM   5113  CA   SER B 239      1.563  76.938  92.934  1.00 21.60           C
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ATOM   5114  C   SER B 239      0.542  76.395  93.940  1.00 22.72      C
ATOM   5115  O   SER B 239      0.155  75.220  93.855  1.00 23.19      O
ATOM   5116  CB  SER B 239      0.847  77.727  91.830  1.00 23.16      C
ATOM   5117  OG  SER B 239      0.039  78.788  92.358  1.00 27.09      O
ATOM   5118  N   ASP B 240      0.139  77.241  94.898  1.00 23.35      N
ATOM   5119  CA  ASP B 240     -0.854  76.884  95.932  1.00 24.85      C
ATOM   5120  C   ASP B 240     -2.176  77.589  95.630  1.00 25.85      C
ATOM   5121  O   ASP B 240     -3.061  77.683  96.497  1.00 25.87      O
ATOM   5122  CB  ASP B 240     -0.400  77.320  97.347  1.00 25.18      C
ATOM   5123  CG  ASP B 240     -0.070  78.832  97.454  1.00 27.24      C
ATOM   5124  OD1 ASP B 240     -0.111  79.575  96.455  1.00 24.85      O
ATOM   5125  OD2 ASP B 240      0.270  79.279  98.572  1.00 28.72      O
ATOM   5126  N   VAL B 241     -2.311  78.089  94.411  1.00 25.56      N
ATOM   5127  CA  VAL B 241     -3.532  78.787  94.033  1.00 26.55      C
ATOM   5128  C   VAL B 241     -4.835  78.011  94.163  1.00 26.52      C
ATOM   5129  O   VAL B 241     -5.886  78.612  94.418  1.00 29.16      O
ATOM   5130  CB  VAL B 241     -3.437  79.312  92.593  1.00 27.77      C
ATOM   5131  CG1 VAL B 241     -3.375  78.130  91.602  1.00 28.13      C
ATOM   5132  CG2 VAL B 241     -4.629  80.216  92.296  1.00 29.37      C
ATOM   5133  N   ASP B 242     -4.784  76.688  94.037  1.00 26.72      N
ATOM   5134  CA  ASP B 242     -5.992  75.866  94.088  1.00 26.15      C
ATOM   5135  C   ASP B 242     -6.334  75.359  95.491  1.00 25.69      C
ATOM   5136  O   ASP B 242     -5.578  74.613  96.101  1.00 26.42      O
ATOM   5137  CB  ASP B 242     -5.825  74.681  93.123  1.00 26.95      C
ATOM   5138  CG  ASP B 242     -7.155  73.977  92.788  1.00 26.31      C
ATOM   5139  OD1 ASP B 242     -7.911  73.618  93.723  1.00 30.26      O
ATOM   5140  OD2 ASP B 242     -7.437  73.765  91.589  1.00 24.25      O
ATOM   5141  N   GLU B 243     -7.495  75.732  96.000  1.00 27.23      N
ATOM   5142  CA  GLU B 243     -7.878  75.300  97.340  1.00 27.73      C
ATOM   5143  C   GLU B 243     -7.922  73.790  97.561  1.00 26.86      C
ATOM   5144  O   GLU B 243     -7.792  73.316  98.698  1.00 25.42      O
ATOM   5145  CB  GLU B 243     -9.222  75.919  97.732  1.00 30.67      C
ATOM   5146  CG  GLU B 243     -9.301  77.403  97.415  1.00 37.12      C
ATOM   5147  CD  GLU B 243    -10.395  78.135  98.208  1.00 40.56      C
ATOM   5148  OE1 GLU B 243    -11.361  77.472  98.671  1.00 41.79      O
ATOM   5149  OE2 GLU B 243    -10.275  79.377  98.354  1.00 42.65      O
ATOM   5150  N   ARG B 244     -8.105  73.014  96.500  1.00 26.19      N
ATOM   5151  CA  ARG B 244     -8.143  71.563  96.705  1.00 25.39      C
ATOM   5152  C   ARG B 244     -6.742  71.052  96.967  1.00 24.82      C
ATOM   5153  O   ARG B 244     -6.574  69.957  97.518  1.00 23.80      O
ATOM   5154  CB  ARG B 244     -8.705  70.840  95.479  1.00 26.29      C
ATOM   5155  CG  ARG B 244    -10.186  71.069  95.258  1.00 25.50      C
ATOM   5156  CD  ARG B 244    -10.588  70.742  93.839  1.00 25.40      C
ATOM   5157  NE  ARG B 244    -10.124  71.763  92.904  1.00 26.67      N
ATOM   5158  CZ  ARG B 244    -10.602  71.895  91.669  1.00 26.21      C
ATOM   5159  NH1 ARG B 244    -11.559  71.075  91.248  1.00 25.16      N
ATOM   5160  NH2 ARG B 244    -10.110  72.809  90.841  1.00 24.33      N
ATOM   5161  N   ASP B 245     -5.745  71.858  96.589  1.00 23.71      N
ATOM   5162  CA  ASP B 245     -4.332  71.499  96.759  1.00 24.42      C
ATOM   5163  C   ASP B 245     -3.740  72.029  98.062  1.00 24.29      C
ATOM   5164  O   ASP B 245     -2.827  71.423  98.634  1.00 24.56      O
ATOM   5165  CB  ASP B 245     -3.477  72.043  95.605  1.00 23.64      C
ATOM   5166  CG  ASP B 245     -3.862  71.453  94.256  1.00 22.09      C
ATOM   5167  OD1 ASP B 245     -4.209  70.244  94.222  1.00 21.83      O
ATOM   5168  OD2 ASP B 245     -3.791  72.202  93.243  1.00 22.64      O
ATOM   5169  N   GLN B 246     -4.270  73.146  98.534  1.00 25.46      N
ATOM   5170  CA  GLN B 246     -3.749  73.763  99.767  1.00 27.27      C
ATOM   5171  C   GLN B 246     -3.666  72.889 101.008  1.00 28.10      C
ATOM   5172  O   GLN B 246     -2.753  73.055 101.826  1.00 27.60      O
ATOM   5173  CB  GLN B 246     -4.530  75.022 100.078  1.00 28.00      C
ATOM   5174  CG  GLN B 246     -4.371  76.051  98.985  1.00 26.41      C
ATOM   5175  CD  GLN B 246     -5.356  77.153  99.165  1.00 29.58      C
ATOM   5176  OE1 GLN B 246     -6.181  77.086 100.079  1.00 31.19      O
ATOM   5177  NE2 GLN B 246     -5.302  78.173  98.304  1.00 29.03      N
ATOM   5178  N   PRO B 247     -4.603  71.945 101.170  1.00 26.92      N
ATOM   5179  CA  PRO B 247     -4.537  71.097 102.355  1.00 27.57      C
ATOM   5180  C   PRO B 247     -3.223  70.346 102.493  1.00 27.43      C
ATOM   5181  O   PRO B 247     -2.885  69.927 103.592  1.00 25.62      O
ATOM   5182  CB  PRO B 247     -5.724  70.149 102.171  1.00 28.05      C
ATOM   5183  CG  PRO B 247     -6.710  71.000 101.421  1.00 27.99      C
ATOM   5184  CD  PRO B 247     -5.852  71.707 100.411  1.00 28.11      C
ATOM   5185  N   PHE B 248     -2.485  70.217 101.386  1.00 26.46      N
ATOM   5186  CA  PHE B 248     -1.212  69.493 101.354  1.00 26.51      C
ATOM   5187  C   PHE B 248      0.049  70.370 101.312  1.00 26.47      C
ATOM   5188  O   PHE B 248      1.162  69.895 101.599  1.00 26.65      O
ATOM   5189  CB  PHE B 248     -1.250  68.501 100.170  1.00 26.88      C
ATOM   5190  CG  PHE B 248     -2.470  67.610 100.186  1.00 26.68      C
ATOM   5191  CD1 PHE B 248     -2.569  66.560 101.101  1.00 28.14      C
ATOM   5192  CD2 PHE B 248     -3.555  67.864  99.335  1.00 27.06      C
ATOM   5193  CE1 PHE B 248     -3.743  65.760 101.178  1.00 27.23      C
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ATOM   5194  CE2 PHE B 248      -4.724  67.087  99.396  1.00 26.39           C
ATOM   5195  CZ  PHE B 248      -4.818  66.031 100.320  1.00 26.86           C
ATOM   5196  N   ILE B 249      -0.128  71.653 101.014  1.00 25.98           N
ATOM   5197  CA  ILE B 249       0.983  72.593 100.943  1.00 28.34           C
ATOM   5198  C   ILE B 249       1.623  72.753 102.334  1.00 28.97           C
ATOM   5199  O   ILE B 249       0.921  72.968 103.318  1.00 28.69           O
ATOM   5200  CB  ILE B 249       0.491  73.980 100.439  1.00 29.21           C
ATOM   5201  CG1 ILE B 249      -0.157  73.841  99.064  1.00 31.59           C
ATOM   5202  CG2 ILE B 249       1.635  74.964 100.405  1.00 30.69           C
ATOM   5203  CD1 ILE B 249       0.766  73.430  97.980  1.00 31.55           C
ATOM   5204  N   THR B 250       2.949  72.658 102.420  1.00 28.72           N
ATOM   5205  CA  THR B 250       3.630  72.789 103.709  1.00 29.26           C
ATOM   5206  C   THR B 250       4.064  74.204 103.978  1.00 28.31           C
ATOM   5207  O   THR B 250       4.311  74.572 105.127  1.00 27.89           O
ATOM   5208  CB  THR B 250       4.956  71.963 103.806  1.00 30.76           C
ATOM   5209  OG1 THR B 250       6.031  72.688 103.169  1.00 32.06           O
ATOM   5210  CG2 THR B 250       4.801  70.602 103.183  1.00 30.82           C
ATOM   5211  N   GLY B 251       4.170  74.994 102.923  1.00 28.18           N
ATOM   5212  CA  GLY B 251       4.645  76.354 103.091  1.00 29.84           C
ATOM   5213  C   GLY B 251       6.091  76.517 102.618  1.00 29.19           C
ATOM   5214  O   GLY B 251       6.452  77.601 102.183  1.00 30.81           O
ATOM   5215  N   GLU B 252       6.913  75.464 102.701  1.00 27.95           N
ATOM   5216  CA  GLU B 252       8.306  75.535 102.252  1.00 26.13           C
ATOM   5217  C   GLU B 252       8.353  75.770 100.715  1.00 25.50           C
ATOM   5218  O   GLU B 252       7.536  75.211  99.966  1.00 21.33           O
ATOM   5219  CB  GLU B 252       9.044  74.228 102.548  1.00 27.85           C
ATOM   5220  CG  GLU B 252       9.234  73.852 103.998  1.00 34.86           C
ATOM   5221  CD  GLU B 252      10.386  72.820 104.180  1.00 40.61           C
ATOM   5222  OE1 GLU B 252      11.482  72.980 103.550  1.00 40.22           O
ATOM   5223  OE2 GLU B 252      10.207  71.849 104.964  1.00 42.69           O
ATOM   5224  N   ARG B 253       9.336  76.565 100.276  1.00 23.74           N
ATOM   5225  CA  ARG B 253       9.528  76.933  98.874  1.00 24.34           C
ATOM   5226  C   ARG B 253      10.947  76.675  98.404  1.00 24.39           C
ATOM   5227  O   ARG B 253      11.879  76.860  99.167  1.00 23.20           O
ATOM   5228  CB  ARG B 253       9.288  78.419  98.704  1.00 27.54           C
ATOM   5229  CG  ARG B 253       7.991  78.883  99.284  1.00 30.14           C
ATOM   5230  CD  ARG B 253       6.913  78.477  98.341  1.00 34.03           C
ATOM   5231  NE  ARG B 253       7.042  79.186  97.080  1.00 34.19           N
ATOM   5232  CZ  ARG B 253       6.849  80.493  96.944  1.00 37.51           C
ATOM   5233  NH1 ARG B 253       6.532  81.237  97.994  1.00 38.35           N
ATOM   5234  NH2 ARG B 253       6.910  81.048  95.745  1.00 40.15           N
ATOM   5235  N   THR B 254      11.117  76.306  97.138  1.00 21.33           N
ATOM   5236  CA  THR B 254      12.449  76.035  96.591  1.00 21.39           C
ATOM   5237  C   THR B 254      12.973  77.275  95.870  1.00 22.03           C
ATOM   5238  O   THR B 254      12.225  78.234  95.651  1.00 20.81           O
ATOM   5239  CB  THR B 254      12.407  74.857  95.586  1.00 20.89           C
ATOM   5240  OG1 THR B 254      11.620  75.239  94.452  1.00 19.75           O
ATOM   5241  CG2 THR B 254      11.766  73.611  96.252  1.00 21.54           C
ATOM   5242  N   ARG B 255      14.238  77.252  95.474  1.00 24.33           N
ATOM   5243  CA  ARG B 255      14.838  78.393  94.772  1.00 25.72           C
ATOM   5244  C   ARG B 255      14.183  78.656  93.438  1.00 25.73           C
ATOM   5245  O   ARG B 255      14.213  79.797  92.918  1.00 24.60           O
ATOM   5246  CB  ARG B 255      16.328  78.167  94.549  1.00 30.62           C
ATOM   5247  CG  ARG B 255      17.122  78.367  95.808  1.00 38.84           C
ATOM   5248  CD  ARG B 255      18.624  78.483  95.520  1.00 44.10           C
ATOM   5249  NE  ARG B 255      18.959  79.820  95.047  1.00 47.82           N
ATOM   5250  CZ  ARG B 255      18.776  80.930  95.763  1.00 50.39           C
ATOM   5251  NH1 ARG B 255      18.262  80.862  96.991  1.00 51.48           N
ATOM   5252  NH2 ARG B 255      19.100  82.114  95.241  1.00 52.39           N
ATOM   5253  N   GLU B 256      13.612  77.604  92.860  1.00 23.72           N
ATOM   5254  CA  GLU B 256      12.930  77.742  91.573  1.00 23.37           C
ATOM   5255  C   GLU B 256      11.547  78.363  91.788  1.00 23.01           C
ATOM   5256  O   GLU B 256      10.881  78.753  90.829  1.00 22.81           O
ATOM   5257  CB  GLU B 256      12.715  76.393  90.887  1.00 22.29           C
ATOM   5258  CG  GLU B 256      13.970  75.638  90.503  1.00 24.15           C
ATOM   5259  CD  GLU B 256      14.399  74.641  91.557  1.00 23.42           C
ATOM   5260  OE1 GLU B 256      13.790  74.593  92.650  1.00 19.39           O
ATOM   5261  OE2 GLU B 256      15.356  73.914  91.275  1.00 23.55           O
ATOM   5262  N   GLY B 257      11.113  78.447  93.043  1.00 22.85           N
ATOM   5263  CA  GLY B 257       9.803  79.010  93.314  1.00 22.61           C
ATOM   5264  C   GLY B 257       8.726  77.952  93.491  1.00 23.40           C
ATOM   5265  O   GLY B 257       7.543  78.285  93.603  1.00 24.95           O
ATOM   5266  N   PHE B 258       9.107  76.680  93.518  1.00 20.07           N
ATOM   5267  CA  PHE B 258       8.122  75.630  93.741  1.00 20.94           C
ATOM   5268  C   PHE B 258       7.669  75.534  95.218  1.00 21.29           C
ATOM   5269  O   PHE B 258       8.293  76.135  96.099  1.00 22.17           O
ATOM   5270  CB  PHE B 258       8.683  74.269  93.291  1.00 19.11           C
ATOM   5271  CG  PHE B 258       9.086  74.227  91.863  1.00 19.38           C
ATOM   5272  CD1 PHE B 258       8.355  74.901  90.899  1.00 19.57           C
ATOM   5273  CD2 PHE B 258      10.219  73.537  91.465  1.00 19.29           C
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ATOM   5274   CE1  PHE  B  258      8.753   74.889   89.561   1.00   20.07          C
ATOM   5275   CE2  PHE  B  258     10.612   73.526   90.132   1.00   19.30          C
ATOM   5276   CZ   PHE  B  258      9.873   74.206   89.184   1.00   19.86          C
ATOM   5277   N    TYR  B  259      6.576   74.813   95.491   1.00   19.01          N
ATOM   5278   CA   TYR  B  259      6.105   74.646   96.888   1.00   18.63          C
ATOM   5279   C    TYR  B  259      6.209   73.198   97.296   1.00   20.22          C
ATOM   5280   O    TYR  B  259      5.942   72.307   96.480   1.00   20.28          O
ATOM   5281   CB   TYR  B  259      4.636   75.020   97.079   1.00   19.41          C
ATOM   5282   CG   TYR  B  259      4.260   76.457   96.807   1.00   20.53          C
ATOM   5283   CD1  TYR  B  259      4.390   76.995   95.540   1.00   20.21          C
ATOM   5284   CD2  TYR  B  259      3.839   77.302   97.849   1.00   21.94          C
ATOM   5285   CE1  TYR  B  259      4.126   78.349   95.290   1.00   23.42          C
ATOM   5286   CE2  TYR  B  259      3.576   78.667   97.606   1.00   23.14          C
ATOM   5287   CZ   TYR  B  259      3.725   79.174   96.322   1.00   22.75          C
ATOM   5288   OH   TYR  B  259      3.449   80.512   96.039   1.00   24.40          O
ATOM   5289   N    ARG  B  260      6.592   72.956   98.542   1.00   20.67          N
ATOM   5290   CA   ARG  B  260      6.651   71.591   99.025   1.00   22.80          C
ATOM   5291   C    ARG  B  260      5.217   71.218   99.322   1.00   23.09          C
ATOM   5292   O    ARG  B  260      4.417   72.074   99.732   1.00   22.33          O
ATOM   5293   CB   ARG  B  260      7.470   71.470  100.306   1.00   24.42          C
ATOM   5294   CG   ARG  B  260      8.954   71.444  100.056   1.00   22.67          C
ATOM   5295   CD   ARG  B  260      9.397   70.161   99.323   1.00   24.34          C
ATOM   5296   NE   ARG  B  260     10.816   70.271   99.015   1.00   21.96          N
ATOM   5297   CZ   ARG  B  260     11.464   69.554   98.104   1.00   26.48          C
ATOM   5298   NH1  ARG  B  260     10.827   68.621   97.375   1.00   24.29          N
ATOM   5299   NH2  ARG  B  260     12.752   69.824   97.872   1.00   24.34          N
ATOM   5300   N    THR  B  261      4.896   69.944   99.120   1.00   23.34          N
ATOM   5301   CA   THR  B  261      3.548   69.451   99.347   1.00   22.13          C
ATOM   5302   C    THR  B  261      3.637   68.013   99.871   1.00   23.58          C
ATOM   5303   O    THR  B  261      4.570   67.285   99.541   1.00   22.88          O
ATOM   5304   CB   THR  B  261      2.730   69.531   98.037   1.00   23.76          C
ATOM   5305   OG1  THR  B  261      1.365   69.177   98.301   1.00   23.37          O
ATOM   5306   CG2  THR  B  261      3.310   68.575   96.976   1.00   23.36          C
ATOM   5307   N    LYS  B  262      2.692   67.622  100.725   1.00   23.32          N
ATOM   5308   CA   LYS  B  262      2.682   66.290  101.304   1.00   26.81          C
ATOM   5309   C    LYS  B  262      2.171   65.261  100.319   1.00   25.46          C
ATOM   5310   O    LYS  B  262      1.033   65.331   99.884   1.00   25.35          O
ATOM   5311   CB   LYS  B  262      1.832   66.261  102.586   1.00   27.02          C
ATOM   5312   CG   LYS  B  262      2.441   67.040  103.733   1.00   33.30          C
ATOM   5313   CD   LYS  B  262      1.478   67.180  104.928   1.00   38.59          C
ATOM   5314   CE   LYS  B  262      2.035   68.114  106.035   1.00   41.15          C
ATOM   5315   NZ   LYS  B  262      3.344   67.648  106.637   1.00   43.55          N
ATOM   5316   N    ASN  B  263      3.030   64.299  100.002   1.00   26.89          N
ATOM   5317   CA   ASN  B  263      2.737   63.238   99.029   1.00   27.54          C
ATOM   5318   C    ASN  B  263      2.128   61.997   99.628   1.00   28.64          C
ATOM   5319   O    ASN  B  263      2.418   61.634  100.775   1.00   29.50          O
ATOM   5320   CB   ASN  B  263      4.018   62.786   98.359   1.00   26.64          C
ATOM   5321   CG   ASN  B  263      4.942   62.127   99.331   1.00   28.06          C
ATOM   5322   OD1  ASN  B  263      5.351   62.747  100.307   1.00   31.11          O
ATOM   5323   ND2  ASN  B  263      5.255   60.861   99.103   1.00   29.53          N
ATOM   5324   N    GLY  B  264      1.333   61.299   98.830   1.00   28.30          N
ATOM   5325   CA   GLY  B  264      0.744   60.066   99.327   1.00   27.45          C
ATOM   5326   C    GLY  B  264     -0.504   59.668   98.584   1.00   26.68          C
ATOM   5327   O    GLY  B  264     -0.862   60.269   97.574   1.00   25.09          O
ATOM   5328   N    ILE  B  265     -1.184   58.652   99.098   1.00   26.17          N
ATOM   5329   CA   ILE  B  265     -2.388   58.210   98.432   1.00   27.50          C
ATOM   5330   C    ILE  B  265     -3.497   59.230   98.592   1.00   26.26          C
ATOM   5331   O    ILE  B  265     -4.347   59.355   97.731   1.00   25.00          O
ATOM   5332   CB   ILE  B  265     -2.860   56.821   98.960   1.00   27.19          C
ATOM   5333   CG1  ILE  B  265     -4.046   56.339   98.131   1.00   27.90          C
ATOM   5334   CG2  ILE  B  265     -3.262   56.896  100.432   1.00   29.60          C
ATOM   5335   CD1  ILE  B  265     -4.446   54.935   98.455   1.00   30.70          C
ATOM   5336   N    GLU  B  266     -3.479   59.962   99.708   1.00   26.45          N
ATOM   5337   CA   GLU  B  266     -4.516   60.944   99.986   1.00   26.86          C
ATOM   5338   C    GLU  B  266     -4.648   62.013   98.914   1.00   24.98          C
ATOM   5339   O    GLU  B  266     -5.759   62.325   98.455   1.00   25.50          O
ATOM   5340   CB   GLU  B  266     -4.266   61.562  101.371   1.00   31.91          C
ATOM   5341   CG   GLU  B  266     -5.437   62.374  101.914   1.00   38.09          C
ATOM   5342   CD   GLU  B  266     -5.291   62.669  103.410   1.00   41.72          C
ATOM   5343   OE1  GLU  B  266     -4.130   62.799  103.877   1.00   43.69          O
ATOM   5344   OE2  GLU  B  266     -6.333   62.784  104.108   1.00   43.83          O
ATOM   5345   N    PRO  B  267     -3.524   62.627   98.516   1.00   24.70          N
ATOM   5346   CA   PRO  B  267     -3.603   63.651   97.475   1.00   24.08          C
ATOM   5347   C    PRO  B  267     -4.059   62.983   96.154   1.00   23.80          C
ATOM   5348   O    PRO  B  267     -4.769   63.605   95.347   1.00   22.03          O
ATOM   5349   CB   PRO  B  267     -2.152   64.163   97.361   1.00   23.41          C
ATOM   5350   CG   PRO  B  267     -1.555   63.838   98.646   1.00   26.25          C
ATOM   5351   CD   PRO  B  267     -2.162   62.539   99.080   1.00   24.22          C
ATOM   5352   N    CYS  B  268     -3.635   61.728   95.943   1.00   23.66          N
ATOM   5353   CA   CYS  B  268     -4.005   60.977   94.714   1.00   24.50          C
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ATOM   5354  C    CYS B 268     -5.512  60.771  94.652  1.00 24.61           C
ATOM   5355  O    CYS B 268     -6.139  60.946  93.601  1.00 24.99           O
ATOM   5356  CB   CYS B 268     -3.311  59.606  94.676  1.00 25.36           C
ATOM   5357  SG   CYS B 268     -1.530  59.706  94.279  1.00 24.27           S
ATOM   5358  N    ILE B 269     -6.086  60.391  95.797  1.00 24.40           N
ATOM   5359  CA   ILE B 269     -7.523  60.161  95.889  1.00 24.43           C
ATOM   5360  C    ILE B 269     -8.290  61.454  95.629  1.00 25.05           C
ATOM   5361  O    ILE B 269     -9.336  61.476  94.936  1.00 24.41           O
ATOM   5362  CB   ILE B 269     -7.912  59.582  97.292  1.00 23.49           C
ATOM   5363  CG1  ILE B 269     -7.369  58.153  97.433  1.00 24.28           C
ATOM   5364  CG2  ILE B 269     -9.440  59.526  97.454  1.00 24.83           C
ATOM   5365  CD1  ILE B 269     -7.531  57.569  98.825  1.00 20.81           C
ATOM   5366  N    ALA B 270     -7.781  62.548  96.168  1.00 25.83           N
ATOM   5367  CA   ALA B 270     -8.450  63.839  96.010  1.00 23.31           C
ATOM   5368  C    ALA B 270     -8.452  64.291  94.561  1.00 24.80           C
ATOM   5369  O    ALA B 270     -9.491  64.690  94.016  1.00 25.41           O
ATOM   5370  CB   ALA B 270     -7.755  64.902  96.883  1.00 23.28           C
ATOM   5371  N    ARG B 271     -7.277  64.244  93.939  1.00 23.53           N
ATOM   5372  CA   ARG B 271     -7.142  64.666  92.557  1.00 22.33           C
ATOM   5373  C    ARG B 271     -7.973  63.754  91.667  1.00 21.57           C
ATOM   5374  O    ARG B 271     -8.630  64.208  90.733  1.00 21.59           O
ATOM   5375  CB   ARG B 271     -5.654  64.641  92.149  1.00 22.62           C
ATOM   5376  CG   ARG B 271     -4.831  65.728  92.871  1.00 23.29           C
ATOM   5377  CD   ARG B 271     -3.351  65.752  92.516  1.00 22.14           C
ATOM   5378  NE   ARG B 271     -2.780  67.046  92.904  1.00 22.20           N
ATOM   5379  CZ   ARG B 271     -2.326  67.962  92.054  1.00 19.65           C
ATOM   5380  NH1  ARG B 271     -2.348  67.733  90.743  1.00 19.15           N
ATOM   5381  NH2  ARG B 271     -1.878  69.132  92.521  1.00 21.71           N
ATOM   5382  N    ALA B 272     -7.939  62.467  91.980  1.00 22.86           N
ATOM   5383  CA   ALA B 272     -8.677  61.474  91.204  1.00 23.45           C
ATOM   5384  C    ALA B 272    -10.155  61.820  91.163  1.00 25.47           C
ATOM   5385  O    ALA B 272    -10.765  61.766  90.104  1.00 26.38           O
ATOM   5386  CB   ALA B 272     -8.455  60.094  91.781  1.00 25.66           C
ATOM   5387  N    LYS B 273    -10.714  62.211  92.306  1.00 26.60           N
ATOM   5388  CA   LYS B 273    -12.120  62.589  92.377  1.00 26.96           C
ATOM   5389  C    LYS B 273    -12.357  63.846  91.585  1.00 24.97           C
ATOM   5390  O    LYS B 273    -13.351  63.958  90.893  1.00 26.70           O
ATOM   5391  CB   LYS B 273    -12.562  62.817  93.837  1.00 28.29           C
ATOM   5392  CG   LYS B 273    -12.415  61.605  94.735  1.00 30.09           C
ATOM   5393  CD   LYS B 273    -12.785  61.969  96.188  1.00 30.97           C
ATOM   5394  CE   LYS B 273    -12.548  60.793  97.117  1.00 34.55           C
ATOM   5395  NZ   LYS B 273    -12.931  61.066  98.550  1.00 34.53           N
ATOM   5396  N    ALA B 274    -11.457  64.820  91.672  1.00 25.63           N
ATOM   5397  CA   ALA B 274    -11.643  66.054  90.919  1.00 22.91           C
ATOM   5398  C    ALA B 274    -11.534  65.824  89.398  1.00 23.99           C
ATOM   5399  O    ALA B 274    -12.181  66.541  88.620  1.00 21.46           O
ATOM   5400  CB   ALA B 274    -10.607  67.119  91.363  1.00 24.04           C
ATOM   5401  N    TYR B 275    -10.687  64.874  88.983  1.00 22.72           N
ATOM   5402  CA   TYR B 275    -10.504  64.563  87.547  1.00 22.94           C
ATOM   5403  C    TYR B 275    -11.595  63.634  86.999  1.00 24.14           C
ATOM   5404  O    TYR B 275    -11.801  63.561  85.782  1.00 23.72           O
ATOM   5405  CB   TYR B 275     -9.177  63.837  87.281  1.00 21.36           C
ATOM   5406  CG   TYR B 275     -7.917  64.567  87.718  1.00 19.75           C
ATOM   5407  CD1  TYR B 275     -7.898  65.952  87.849  1.00 16.47           C
ATOM   5408  CD2  TYR B 275     -6.744  63.851  87.993  1.00 19.77           C
ATOM   5409  CE1  TYR B 275     -6.722  66.635  88.265  1.00 18.94           C
ATOM   5410  CE2  TYR B 275     -5.574  64.522  88.398  1.00 21.30           C
ATOM   5411  CZ   TYR B 275     -5.583  65.908  88.534  1.00 19.03           C
ATOM   5412  OH   TYR B 275     -4.438  66.544  88.989  1.00 23.48           O
ATOM   5413  N    ALA B 276    -12.293  62.920  87.883  1.00 25.19           N
ATOM   5414  CA   ALA B 276    -13.287  61.940  87.414  1.00 26.29           C
ATOM   5415  C    ALA B 276    -14.348  62.377  86.396  1.00 26.37           C
ATOM   5416  O    ALA B 276    -14.682  61.618  85.483  1.00 28.05           O
ATOM   5417  CB   ALA B 276    -13.952  61.264  88.611  1.00 25.73           C
ATOM   5418  N    PRO B 277    -14.910  63.583  86.531  1.00 26.76           N
ATOM   5419  CA   PRO B 277    -15.918  63.958  85.535  1.00 26.34           C
ATOM   5420  C    PRO B 277    -15.309  64.149  84.141  1.00 27.20           C
ATOM   5421  O    PRO B 277    -16.031  64.181  83.138  1.00 28.10           O
ATOM   5422  CB   PRO B 277    -16.440  65.304  86.034  1.00 26.17           C
ATOM   5423  CG   PRO B 277    -16.169  65.268  87.520  1.00 26.08           C
ATOM   5424  CD   PRO B 277    -14.817  64.591  87.605  1.00 27.97           C
ATOM   5425  N    PHE B 278    -13.994  64.341  84.102  1.00 26.74           N
ATOM   5426  CA   PHE B 278    -13.271  64.619  82.849  1.00 24.45           C
ATOM   5427  C    PHE B 278    -12.389  63.452  82.358  1.00 25.16           C
ATOM   5428  O    PHE B 278    -11.502  63.655  81.502  1.00 25.75           O
ATOM   5429  CB   PHE B 278    -12.384  65.848  83.079  1.00 24.55           C
ATOM   5430  CG   PHE B 278    -13.104  67.032  83.707  1.00 24.89           C
ATOM   5431  CD1  PHE B 278    -13.778  67.955  82.916  1.00 23.44           C
ATOM   5432  CD2  PHE B 278    -13.078  67.240  85.094  1.00 23.83           C
ATOM   5433  CE1  PHE B 278    -14.423  69.081  83.478  1.00 25.55           C
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| ATOM | 5434 | CE2 | PHE | B | 278 | -13.728 | 68.373 | 85.666 | 1.00 | 25.57 | C |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 5435 | CZ  | PHE | B | 278 | -14.396 | 69.284 | 84.843 | 1.00 | 23.92 | C |
| ATOM | 5436 | N   | ALA | B | 279 | -12.598 | 62.249 | 82.889 | 1.00 | 24.46 | N |
| ATOM | 5437 | CA  | ALA | B | 279 | -11.751 | 61.108 | 82.513 | 1.00 | 24.30 | C |
| ATOM | 5438 | C   | ALA | B | 279 | -12.451 | 59.759 | 82.387 | 1.00 | 25.08 | C |
| ATOM | 5439 | O   | ALA | B | 279 | -13.168 | 59.349 | 83.295 | 1.00 | 23.77 | O |
| ATOM | 5440 | CB  | ALA | B | 279 | -10.612 | 60.972 | 83.540 | 1.00 | 23.47 | C |
| ATOM | 5441 | N   | ASP | B | 280 | -12.216 | 59.055 | 81.277 | 1.00 | 25.09 | N |
| ATOM | 5442 | CA  | ASP | B | 280 | -12.805 | 57.729 | 81.068 | 1.00 | 23.84 | C |
| ATOM | 5443 | C   | ASP | B | 280 | -12.089 | 56.664 | 81.912 | 1.00 | 24.84 | C |
| ATOM | 5444 | O   | ASP | B | 280 | -12.643 | 55.572 | 82.220 | 1.00 | 22.86 | O |
| ATOM | 5445 | CB  | ASP | B | 280 | -12.755 | 57.366 | 79.569 | 1.00 | 23.28 | C |
| ATOM | 5446 | CG  | ASP | B | 280 | -13.427 | 58.435 | 78.684 | 1.00 | 26.54 | C |
| ATOM | 5447 | OD1 | ASP | B | 280 | -14.576 | 58.844 | 79.000 | 1.00 | 25.28 | O |
| ATOM | 5448 | OD2 | ASP | B | 280 | -12.808 | 58.866 | 77.679 | 1.00 | 24.23 | O |
| ATOM | 5449 | N   | LEU | B | 281 | -10.822 | 56.929 | 82.239 | 1.00 | 24.53 | N |
| ATOM | 5450 | CA  | LEU | B | 281 | -10.088 | 56.030 | 83.127 | 1.00 | 24.26 | C |
| ATOM | 5451 | C   | LEU | B | 281 | -9.209  | 56.935 | 83.967 | 1.00 | 24.74 | C |
| ATOM | 5452 | O   | LEU | B | 281 | -8.817  | 58.002 | 83.495 | 1.00 | 23.86 | O |
| ATOM | 5453 | CB  | LEU | B | 281 | -9.217  | 55.010 | 82.384 | 1.00 | 23.49 | C |
| ATOM | 5454 | CG  | LEU | B | 281 | -10.042 | 53.920 | 81.668 | 1.00 | 21.22 | C |
| ATOM | 5455 | CD1 | LEU | B | 281 | -10.014 | 54.207 | 80.203 | 1.00 | 21.97 | C |
| ATOM | 5456 | CD2 | LEU | B | 281 | -9.511  | 52.517 | 81.985 | 1.00 | 22.04 | C |
| ATOM | 5457 | N   | ILE | B | 282 | -8.953  | 56.520 | 85.216 | 1.00 | 25.71 | N |
| ATOM | 5458 | CA  | ILE | B | 282 | -8.097  | 57.273 | 86.123 | 1.00 | 23.06 | C |
| ATOM | 5459 | C   | ILE | B | 282 | -6.991  | 56.348 | 86.559 | 1.00 | 23.49 | C |
| ATOM | 5460 | O   | ILE | B | 282 | -7.228  | 55.154 | 86.831 | 1.00 | 22.07 | O |
| ATOM | 5461 | CB  | ILE | B | 282 | -8.855  | 57.755 | 87.345 | 1.00 | 26.91 | C |
| ATOM | 5462 | CG1 | ILE | B | 282 | -9.999  | 58.685 | 86.898 | 1.00 | 27.95 | C |
| ATOM | 5463 | CG2 | ILE | B | 282 | -7.873  | 58.450 | 88.312 | 1.00 | 28.58 | C |
| ATOM | 5464 | CD1 | ILE | B | 282 | -10.912 | 59.215 | 88.035 | 1.00 | 29.25 | C |
| ATOM | 5465 | N   | TRP | B | 283 | -5.792  | 56.917 | 86.714 | 1.00 | 20.48 | N |
| ATOM | 5466 | CA  | TRP | B | 283 | -4.615  | 56.136 | 87.054 | 1.00 | 21.01 | C |
| ATOM | 5467 | C   | TRP | B | 283 | -3.734  | 56.869 | 88.052 | 1.00 | 20.82 | C |
| ATOM | 5468 | O   | TRP | B | 283 | -3.553  | 58.051 | 87.904 | 1.00 | 21.40 | O |
| ATOM | 5469 | CB  | TRP | B | 283 | -3.864  | 55.886 | 85.722 | 1.00 | 20.49 | C |
| ATOM | 5470 | CG  | TRP | B | 283 | -2.353  | 55.606 | 85.717 | 1.00 | 20.38 | C |
| ATOM | 3471 | CD1 | TRP | B | 283 | -1.589  | 55.053 | 86.712 | 1.00 | 21.75 | C |
| ATOM | 5472 | CD2 | TRP | B | 283 | -1.491  | 55.746 | 84.583 | 1.00 | 19.62 | C |
| ATOM | 5473 | NE1 | TRP | B | 283 | -0.298  | 54.829 | 86.255 | 1.00 | 21.43 | N |
| ATOM | 5474 | CE2 | TRP | B | 283 | -0.215  | 55.248 | 84.954 | 1.00 | 21.58 | C |
| ATOM | 5475 | CE3 | TRP | B | 283 | -1.680  | 56.234 | 83.287 | 1.00 | 18.19 | C |
| ATOM | 5476 | CZ2 | TRP | B | 283 | 0.870   | 55.227 | 84.063 | 1.00 | 19.93 | C |
| ATOM | 5477 | CZ3 | TRP | B | 283 | -0.612  | 56.218 | 82.401 | 1.00 | 20.15 | C |
| ATOM | 5478 | CH2 | TRP | B | 283 | 0.646   | 55.718 | 82.791 | 1.00 | 20.23 | C |
| ATOM | 5479 | N   | MET | B | 284 | -3.231  | 56.180 | 89.080 | 1:00 | 22.30 | N |
| ATOM | 5480 | CA  | MET | B | 284 | -2.293  | 56.836 | 89.980 | 1.00 | 23.45 | C |
| ATOM | 5481 | C   | MET | B | 284 | -1.002  | 56.042 | 89.971 | 1.00 | 22.54 | C |
| ATOM | 5482 | O   | MET | B | 284 | -1.012  | 54.828 | 90.168 | 1.00 | 23.46 | O |
| ATOM | 5483 | CB  | MET | B | 284 | -2.836  | 56.979 | 91.426 | 1.00 | 25.30 | C |
| ATOM | 5484 | CG  | MET | B | 284 | -2.850  | 55.715 | 92.271 | 1.00 | 25.52 | C |
| ATOM | 5485 | SD  | MET | B | 284 | -3.111  | 56.057 | 94.080 | 1.00 | 25.74 | S |
| ATOM | 5486 | CE  | MET | B | 284 | -1.596  | 55.590 | 94.740 | 1.00 | 26.63 | C |
| ATOM | 5487 | N   | GLU | B | 285 | 0.111   | 56.695 | 89.689 | 1.00 | 20.62 | N |
| ATOM | 5488 | CA  | GLU | B | 285 | 1.372   | 56.000 | 89.729 | 1.00 | 22.91 | C |
| ATOM | 5489 | C   | GLU | B | 285 | 1.597   | 55.634 | 91.211 | 1.00 | 22.92 | C |
| ATOM | 5490 | O   | GLU | B | 285 | 1.122   | 56.345 | 92.093 | 1.00 | 24.29 | O |
| ATOM | 5491 | CB  | GLU | B | 285 | 2.503   | 56.916 | 89.213 | 1.00 | 22.87 | C |
| ATOM | 5492 | CG  | GLU | B | 285 | 2.548   | 57.101 | 87.690 | 1.00 | 23.86 | C |
| ATOM | 5493 | CD  | GLU | B | 285 | 3.004   | 55.820 | 86.948 | 1.00 | 26.05 | C |
| ATOM | 5494 | OE1 | GLU | B | 285 | 2.382   | 54.741 | 87.127 | 1.00 | 23.11 | O |
| ATOM | 5495 | OE2 | GLU | B | 285 | 3.984   | 55.884 | 86.178 | 1.00 | 29.01 | O |
| ATOM | 5496 | N   | THR | B | 286 | 2.307   | 54.532 | 91.472 | 1.00 | 25.05 | N |
| ATOM | 5497 | CA  | THR | B | 286 | 2.594   | 54.093 | 92.840 | 1.00 | 25.75 | C |
| ATOM | 5498 | C   | THR | B | 286 | 4.021   | 53.598 | 92.917 | 1.00 | 25.86 | C |
| ATOM | 5499 | O   | THR | B | 286 | 4.596   | 53.191 | 91.903 | 1.00 | 24.48 | O |
| ATOM | 5500 | CB  | THR | B | 286 | 1.659   | 52.950 | 93.273 | 1.00 | 28.08 | C |
| ATOM | 5501 | OG1 | THR | B | 286 | 1.906   | 51.796 | 92.458 | 1.00 | 29.46 | O |
| ATOM | 5502 | CG2 | THR | B | 286 | 0.202   | 53.360 | 93.079 | 1.00 | 30.55 | C |
| ATOM | 5503 | N   | GLY | B | 287 | 4.581   | 53.588 | 94.122 | 1.00 | 25.58 | N |
| ATOM | 5504 | CA  | GLY | B | 287 | 5.963   | 53.179 | 94.283 | 1.00 | 27.77 | C |
| ATOM | 5505 | C   | GLY | B | 287 | 6.276   | 51.696 | 94.362 | 1.00 | 27.44 | C |
| ATOM | 5506 | O   | GLY | B | 287 | 7.441   | 51.307 | 94.345 | 1.00 | 27.75 | O |
| ATOM | 5507 | N   | THR | B | 288 | 5.247   | 50.868 | 94.467 | 1.00 | 26.75 | N |
| ATOM | 5508 | CA  | THR | B | 288 | 5.451   | 49.419 | 94.547 | 1.00 | 28.25 | C |
| ATOM | 5509 | C   | THR | B | 288 | 4.210   | 48.745 | 94.012 | 1.00 | 27.05 | C |
| ATOM | 5510 | O   | THR | B | 288 | 3.135   | 49.333 | 94.010 | 1.00 | 26.62 | O |
| ATOM | 5511 | CB  | THR | B | 288 | 5.555   | 48.874 | 96.006 | 1.00 | 28.51 | C |
| ATOM | 5512 | OG1 | THR | B | 288 | 4.383   | 49.267 | 96.721 | 1.00 | 28.47 | O |
| ATOM | 5513 | CG2 | THR | B | 288 | 6.787   | 49.364 | 96.716 | 1.00 | 28.91 | C |

| ATOM | 5514 | N   | PRO B 289 |  4.348 | 47.503 |  93.544 | 1.00 | 26.98 | N |
|------|------|-----|-----------|--------|--------|---------|------|-------|---|
| ATOM | 5515 | CA  | PRO B 289 |  3.172 | 46.784 |  93.037 | 1.00 | 28.79 | C |
| ATOM | 5516 | C   | PRO B 289 |  2.507 | 46.199 |  94.306 | 1.00 | 30.04 | C |
| ATOM | 5517 | O   | PRO B 289 |  2.956 | 45.164 |  94.826 | 1.00 | 31.57 | O |
| ATOM | 5518 | CB  | PRO B 289 |  3.781 | 45.694 |  92.159 | 1.00 | 26.58 | C |
| ATOM | 5519 | CG  | PRO B 289 |  5.030 | 45.361 |  92.866 | 1.00 | 27.87 | C |
| ATOM | 5520 | CD  | PRO B 289 |  5.577 | 46.710 |  93.360 | 1.00 | 26.32 | C |
| ATOM | 5521 | N   | ASP B 290 |  1.463 | 46.861 |  94.791 | 1.00 | 30.74 | N |
| ATOM | 5522 | CA  | ASP B 290 |  0.773 | 46.470 |  96.031 | 1.00 | 32.51 | C |
| ATOM | 5523 | C   | ASP B 290 | -0.760 | 46.437 |  95.852 | 1.00 | 32.17 | C |
| ATOM | 5524 | O   | ASP B 290 | -1.402 | 47.471 |  95.644 | 1.00 | 30.60 | O |
| ATOM | 5525 | CB  | ASP B 290 |  1.195 | 47.453 |  97.151 | 1.00 | 34.23 | C |
| ATOM | 5526 | CG  | ASP B 290 |  0.475 | 47.208 |  98.493 | 1.00 | 36.83 | C |
| ATOM | 5527 | OD1 | ASP B 290 |  0.090 | 46.067 |  98.772 | 1.00 | 38.60 | O |
| ATOM | 5528 | OD2 | ASP B 290 |  0.313 | 48.166 |  99.284 | 1.00 | 37.43 | O |
| ATOM | 5529 | N   | LEU B 291 | -1.346 | 45.238 |  95.928 | 1.00 | 31.46 | N |
| ATOM | 5530 | CA  | LEU B 291 | -2.790 | 45.104 |  95.737 | 1.00 | 32.55 | C |
| ATOM | 5531 | C   | LEU B 291 | -3.596 | 45.856 |  96.783 | 1.00 | 33.00 | C |
| ATOM | 5532 | O   | LEU B 291 | -4.679 | 46.408 |  96.498 | 1.00 | 31.54 | O |
| ATOM | 5533 | CB  | LEU B 291 | -3.192 | 43.624 |  95.731 | 1.00 | 30.34 | C |
| ATOM | 5534 | CG  | LEU B 291 | -2.784 | 42.882 |  94.466 | 1.00 | 31.61 | C |
| ATOM | 5535 | CD1 | LEU B 291 | -3.146 | 41.398 |  94.604 | 1.00 | 32.50 | C |
| ATOM | 5536 | CD2 | LEU B 291 | -3.488 | 43.523 |  93.266 | 1.00 | 30.25 | C |
| ATOM | 5537 | N   | GLU B 292 | -3.067 | 45.868 |  97.999 | 1.00 | 34.25 | N |
| ATOM | 5538 | CA  | GLU B 292 | -3.719 | 46.567 |  99.092 | 1.00 | 36.14 | C |
| ATOM | 5539 | C   | GLU B 292 | -3.816 | 48.083 |  98.773 | 1.00 | 35.03 | C |
| ATOM | 5540 | O   | GLU B 292 | -4.906 | 48.651 |  98.801 | 1.00 | 33.26 | O |
| ATOM | 5541 | CB  | GLU B 292 | -2.935 | 46.296 | 100.388 | 1.00 | 38.75 | C |
| ATOM | 5542 | CG  | GLU B 292 | -2.974 | 47.412 | 101.437 | 1.00 | 44.66 | C |
| ATOM | 5543 | CD  | GLU B 292 | -4.328 | 47.604 | 102.141 | 1.00 | 46.28 | C |
| ATOM | 5544 | OE1 | GLU B 292 | -5.301 | 48.032 | 101.479 | 1.00 | 46.51 | O |
| ATOM | 5545 | OE2 | GLU B 292 | -4.399 | 47.328 | 103.368 | 1.00 | 46.29 | O |
| ATOM | 5546 | N   | ALA B 293 | -2.694 | 48.732 |  98.449 | 1.00 | 33.78 | N |
| ATOM | 5547 | CA  | ALA B 293 | -2.749 | 50.171 |  98.139 | 1.00 | 32.23 | C |
| ATOM | 5548 | C   | ALA B 293 | -3.660 | 50.409 |  96.941 | 1.00 | 31.05 | C |
| ATOM | 5549 | O   | ALA B 293 | -4.406 | 51.400 |  96.898 | 1.00 | 29.31 | O |
| ATOM | 5550 | CB  | ALA B 293 | -1.331 | 50.735 |  97.861 | 1.00 | 31.86 | C |
| ATOM | 5551 | N   | ALA B 294 | -3.578 | 49.519 |  95.951 | 1.00 | 29.91 | N |
| ATOM | 5552 | CA  | ALA B 294 | -4.439 | 49.633 |  94.780 | 1.00 | 30.03 | C |
| ATOM | 5553 | C   | ALA B 294 | -5.903 | 49.571 |  95.221 | 1.00 | 30.76 | C |
| ATOM | 5554 | O   | ALA B 294 | -6.747 | 50.330 |  94.720 | 1.00 | 29.24 | O |
| ATOM | 5555 | CB  | ALA B 294 | -4.149 | 48.500 |  93.763 | 1.00 | 29.95 | C |
| ATOM | 5556 | N   | ARG B 295 | -6.206 | 48.661 |  96.148 | 1.00 | 29.97 | N |
| ATOM | 5557 | CA  | ARG B 295 | -7.581 | 48.550 |  96.618 | 1.00 | 31.65 | C |
| ATOM | 5558 | C   | ARG B 295 | -8.008 | 49.840 |  97.342 | 1.00 | 30.95 | C |
| ATOM | 5559 | O   | ARG B 295 | -9.102 | 50.353 |  97.097 | 1.00 | 31.00 | O |
| ATOM | 5560 | CB  | ARG B 295 | -7.752 | 47.334 |  97.541 | 1.00 | 32.59 | C |
| ATOM | 5561 | CG  | ARG B 295 | -9.231 | 46.985 |  97.814 | 1.00 | 33.88 | C |
| ATOM | 5562 | CD  | ARG B 295 | -9.354 | 45.988 |  98.964 | 1.00 | 36.08 | C |
| ATOM | 5563 | NE  | ARG B 295 | -8.577 | 44.794 |  98.685 | 1.00 | 38.67 | N |
| ATOM | 5564 | CZ  | ARG B 295 | -8.979 | 43.806 |  97.889 | 1.00 | 39.53 | C |
| ATOM | 5565 | NH1 | ARG B 295 | -10.175 | 43.859 |  97.292 | 1.00 | 36.79 | N |
| ATOM | 5566 | NH2 | ARG B 295 | -8.164 | 42.779 |  97.672 | 1.00 | 38.62 | N |
| ATOM | 5567 | N   | GLN B 296 | -7.155 | 50.368 |  98.225 | 1.00 | 30.87 | N |
| ATOM | 5568 | CA  | GLN B 296 | -7.486 | 51.614 |  98.929 | 1.00 | 30.17 | C |
| ATOM | 5569 | C   | GLN B 296 | -7.943 | 52.693 |  97.947 | 1.00 | 28.95 | C |
| ATOM | 5570 | O   | GLN B 296 | -8.972 | 53.338 |  98.130 | 1.00 | 26.47 | O |
| ATOM | 5571 | CB  | GLN B 296 | -6.281 | 52.181 |  99.657 | 1.00 | 32.80 | C |
| ATOM | 5572 | CG  | GLN B 296 | -5.870 | 51.502 | 100.906 | 1.00 | 35.79 | C |
| ATOM | 5573 | CD  | GLN B 296 | -4.757 | 52.272 | 101.575 | 1.00 | 39.48 | C |
| ATOM | 5574 | OE1 | GLN B 296 | -5.002 | 53.151 | 102.405 | 1.00 | 42.46 | O |
| ATOM | 5575 | NE2 | GLN B 296 | -3.516 | 51.972 | 101.195 | 1.00 | 38.14 | N |
| ATOM | 5576 | N   | PHE B 297 | -7.147 | 52.877 |  96.900 | 1.00 | 28.08 | N |
| ATOM | 5577 | CA  | PHE B 297 | -7.419 | 53.881 |  95.887 | 1.00 | 26.97 | C |
| ATOM | 5578 | C   | PHE B 297 | -8.737 | 53.614 |  95.193 | 1.00 | 27.89 | C |
| ATOM | 5579 | O   | PHE B 297 | -9.564 | 54.513 |  95.036 | 1.00 | 25.38 | O |
| ATOM | 5580 | CB  | PHE B 297 | -6.309 | 53.877 |  94.845 | 1.00 | 26.80 | C |
| ATOM | 5581 | CG  | PHE B 297 | -6.522 | 54.849 |  93.726 | 1.00 | 26.95 | C |
| ATOM | 5582 | CD1 | PHE B 297 | -6.554 | 56.224 |  93.972 | 1.00 | 25.44 | C |
| ATOM | 5583 | CD2 | PHE B 297 | -6.627 | 54.399 |  92.401 | 1.00 | 25.77 | C |
| ATOM | 5584 | CE1 | PHE B 297 | -6.676 | 57.141 |  92.905 | 1.00 | 24.40 | C |
| ATOM | 5585 | CE2 | PHE B 297 | -6.751 | 55.303 |  91.345 | 1.00 | 24.66 | C |
| ATOM | 5586 | CZ  | PHE B 297 | -6.774 | 56.670 |  91.593 | 1.00 | 26.69 | C |
| ATOM | 5587 | N   | SER B 298 | -8.896 | 52.372 |  94.746 | 1.00 | 27.87 | N |
| ATOM | 5588 | CA  | SER B 298 | -10.124 | 51.950 |  94.066 | 1.00 | 30.15 | C |
| ATOM | 5589 | C   | SER B 298 | -11.385 | 52.154 |  94.905 | 1.00 | 29.82 | C |
| ATOM | 5590 | O   | SER B 298 | -12.366 | 52.733 |  94.431 | 1.00 | 29.23 | O |
| ATOM | 5591 | CB  | SER B 298 | -10.028 | 50.470 |  93.701 | 1.00 | 31.03 | C |
| ATOM | 5592 | OG  | SER B 298 | -11.238 | 50.041 |  93.121 | 1.00 | 34.67 | O |
| ATOM | 5593 | N   | GLU B 299 | -11.380 | 51.649 |  96.142 | 1.00 | 30.80 | N |

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ATOM   5594  CA  GLU B 299     -12.585  51.809  96.983  1.00 32.03           C
ATOM   5595  C   GLU B 299     -12.881  53.268  97.214  1.00 31.35           C
ATOM   5596  O   GLU B 299     -14.033  53.700  97.133  1.00 31.78           O
ATOM   5597  CB  GLU B 299     -12.417  51.127  98.335  1.00 32.95           C
ATOM   5598  CG  GLU B 299     -12.172  49.649  98.212  1.00 36.92           C
ATOM   5599  CD  GLU B 299     -12.122  48.945  99.554  1.00 40.90           C
ATOM   5600  OE1 GLU B 299     -11.743  49.588 100.568  1.00 41.34           O
ATOM   5601  OE2 GLU B 299     -12.443  47.731  99.590  1.00 42.13           O
ATOM   5602  N   ALA B 300     -11.830  54.033  97.494  1.00 30.51           N
ATOM   5603  CA  ALA B 300     -11.983  55.458  97.773  1.00 30.25           C
ATOM   5604  C   ALA B 300     -12.568  56.204  96.593  1.00 29.43           C
ATOM   5605  O   ALA B 300     -13.493  57.001  96.738  1.00 28.45           O
ATOM   5606  CB  ALA B 300     -10.612  56.056  98.182  1.00 28.71           C
ATOM   5607  N   VAL B 301     -12.033  55.956  95.403  1.00 29.32           N
ATOM   5608  CA  VAL B 301     -12.551  56.661  94.241  1.00 29.35           C
ATOM   5609  C   VAL B 301     -13.955  56.204  93.840  1.00 29.78           C
ATOM   5610  O   VAL B 301     -14.817  57.036  93.536  1.00 26.67           O
ATOM   5611  CB  VAL B 301     -11.611  56.515  93.012  1.00 29.14           C
ATOM   5612  CG1 VAL B 301     -12.217  57.238  91.828  1.00 28.75           C
ATOM   5613  CG2 VAL B 301     -10.231  57.104  93.333  1.00 25.36           C
ATOM   5614  N   LYS B 302     -14.161  54.887  93.821  1.00 30.00           N
ATOM   5615  CA  LYS B 302     -15.465  54.346  93.442  1.00 33.61           C
ATOM   5616  C   LYS B 302     -16.543  54.649  94.484  1.00 34.98           C
ATOM   5617  O   LYS B 302     -17.737  54.607  94.183  1.00 34.24           O
ATOM   5618  CB  LYS B 302     -15.368  52.842  93.172  1.00 33.12           C
ATOM   5619  CG  LYS B 302     -14.958  52.529  91.729  1.00 33.19           C
ATOM   5620  CD  LYS B 302     -14.613  51.059  91.552  1.00 32.54           C
ATOM   5621  CE  LYS B 302     -14.255  50.732  90.110  1.00 30.96           C
ATOM   5622  NZ  LYS B 302     -15.414  51.009  89.224  1.00 34.63           N
ATOM   5623  N   ALA B 303     -16.114  54.974  95.701  1.00 35.63           N
ATOM   5624  CA  ALA B 303     -17.047  55.326  96.750  1.00 36.07           C
ATOM   5625  C   ALA B 303     -17.766  56.606  96.313  1.00 37.12           C
ATOM   5626  O   ALA B 303     -18.840  56.907  96.817  1.00 37.37           O
ATOM   5627  CB  ALA B 303     -16.305  55.546  98.060  1.00 35.63           C
ATOM   5628  N   GLU B 304     -17.186  57.354  95.372  1.00 37.51           N
ATOM   5629  CA  GLU B 304     -17.819  58.581  94.883  1.00 39.01           C
ATOM   5630  C   GLU B 304     -18.254  58.478  93.405  1.00 39.06           C
ATOM   5631  O   GLU B 304     -19.154  59.203  92.945  1.00 38.53           O
ATOM   5632  CB  GLU B 304     -16.865  59.762  95.062  1.00 41.91           C
ATOM   5633  CG  GLU B 304     -17.527  61.120  94.904  1.00 46.30           C
ATOM   5634  CD  GLU B 304     -17.128  62.098  96.015  1.00 49.26           C
ATOM   5635  OE1 GLU B 304     -15.914  62.360  96.162  1.00 49.63           O
ATOM   5636  OE2 GLU B 304     -18.027  62.603  96.739  1.00 50.54           O
ATOM   5637  N   TYR B 305     -17.602  57.584  92.662  1.00 37.31           N
ATOM   5638  CA  TYR B 305     -17.911  57.356  91.246  1.00 36.61           C
ATOM   5639  C   TYR B 305     -17.853  55.851  91.090  1.00 36.40           C
ATOM   5640  O   TYR B 305     -16.819  55.282  90.727  1.00 35.76           O
ATOM   5641  CB  TYR B 305     -16.870  58.042  90.370  1.00 35.64           C
ATOM   5642  CG  TYR B 305     -16.956  59.554  90.468  1.00 35.12           C
ATOM   5643  CD1 TYR B 305     -17.948  60.251  89.783  1.00 33.80           C
ATOM   5644  CD2 TYR B 305     -16.072  60.278  91.276  1.00 33.95           C
ATOM   5645  CE1 TYR B 305     -18.065  61.632  89.887  1.00 35.48           C
ATOM   5646  CE2 TYR B 305     -16.187  61.679  91.399  1.00 34.22           C
ATOM   5647  CZ  TYR B 305     -17.187  62.342  90.694  1.00 36.14           C
ATOM   5648  OH  TYR B 305     -17.313  63.713  90.772  1.00 36.26           O
ATOM   5649  N   PRO B 306     -18.973  55.176  91.400  1.00 36.60           N
ATOM   5650  CA  PRO B 306     -19.080  53.716  91.322  1.00 36.09           C
ATOM   5651  C   PRO B 306     -18.717  53.140  89.979  1.00 35.30           C
ATOM   5652  O   PRO B 306     -18.136  52.060  89.906  1.00 34.90           O
ATOM   5653  CB  PRO B 306     -20.549  53.446  91.667  1.00 36.54           C
ATOM   5654  CG  PRO B 306     -20.959  54.650  92.465  1.00 37.17           C
ATOM   5655  CD  PRO B 306     -20.289  55.772  91.700  1.00 37.51           C
ATOM   5656  N   ASP B 307     -19.068  53.876  88.930  1.00 35.65           N
ATOM   5657  CA  ASP B 307     -18.833  53.448  87.557  1.00 34.78           C
ATOM   5658  C   ASP B 307     -17.492  53.857  86.972  1.00 34.03           C
ATOM   5659  O   ASP B 307     -17.228  53.570  85.802  1.00 35.63           O
ATOM   5660  CB  ASP B 307     -19.956  53.969  86.650  1.00 34.64           C
ATOM   5661  CG  ASP B 307     -21.326  53.450  87.066  1.00 34.76           C
ATOM   5662  OD1 ASP B 307     -21.397  52.305  87.532  1.00 33.29           O
ATOM   5663  OD2 ASP B 307     -22.322  54.182  86.930  1.00 35.15           O
ATOM   5664  N   GLN B 308     -16.643  54.510  87.764  1.00 32.23           N
ATOM   5665  CA  GLN B 308     -15.354  54.952  87.254  1.00 29.14           C
ATOM   5666  C   GLN B 308     -14.348  53.830  86.996  1.00 28.89           C
ATOM   5667  O   GLN B 308     -13.929  53.113  87.911  1.00 29.50           O
ATOM   5668  CB  GLN B 308     -14.741  55.970  88.212  1.00 30.04           C
ATOM   5669  CG  GLN B 308     -13.430  56.573  87.702  1.00 27.99           C
ATOM   5670  CD  GLN B 308     -13.601  57.343  86.405  1.00 27.91           C
ATOM   5671  OE1 GLN B 308     -13.094  56.932  85.346  1.00 30.28           O
ATOM   5672  NE2 GLN B 308     -14.301  58.461  86.468  1.00 22.97           N
ATOM   5673  N   MET B 309     -13.949  53.673  85.739  1.00 27.51           N
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ATOM   5674  CA  MET B 309     -12.972  52.634  85.416  1.00 28.38           C
ATOM   5675  C   MET B 309     -11.568  53.178  85.739  1.00 28.09           C
ATOM   5676  O   MET B 309     -11.307  54.368  85.602  1.00 27.27           O
ATOM   5677  CB  MET B 309     -13.064  52.236  83.931  1.00 28.49           C
ATOM   5678  CG  MET B 309     -14.342  51.547  83.546  1.00 29.04           C
ATOM   5679  SD  MET B 309     -14.254  50.913  81.852  1.00 31.75           S
ATOM   5680  CE  MET B 309     -14.616  52.448  80.973  1.00 26.31           C
ATOM   5681  N   LEU B 310     -10.681  52.284  86.162  1.00 29.60           N
ATOM   5682  CA  LEU B 310      -9.321  52.665  86.525  1.00 27.69           C
ATOM   5683  C   LEU B 310      -8.256  51.978  85.666  1.00 27.04           C
ATOM   5684  O   LEU B 310      -8.511  50.943  85.021  1.00 26.03           O
ATOM   5685  CB  LEU B 310      -9.098  52.366  88.014  1.00 28.26           C
ATOM   5686  CG  LEU B 310     -10.226  52.900  88.912  1.00 26.79           C
ATOM   5687  CD1 LEU B 310     -10.049  52.362  90.333  1.00 25.48           C
ATOM   5688  CD2 LEU B 310     -10.267  54.423  88.864  1.00 25.91           C
ATOM   5689  N   ALA B 311      -7.056  52.561  85.642  1.00 25.37           N
ATOM   5690  CA  ALA B 311      -5.972  51.971  84.867  1.00 24.59           C
ATOM   5691  C   ALA B 311      -4.808  51.725  85.808  1.00 23.07           C
ATOM   5692  O   ALA B 311      -4.625  52.457  86.787  1.00 24.80           O
ATOM   5693  CB  ALA B 311      -5.571  52.918  83.718  1.00 22.16           C
ATOM   5694  N   TYR B 312      -4.019  50.701  85.522  1.00 23.58           N
ATOM   5695  CA  TYR B 312      -2.892  50.368  86.354  1.00 22.04           C
ATOM   5696  C   TYR B 312      -1.617  50.011  85.566  1.00 22.53           C
ATOM   5697  O   TYR B 312      -1.620  49.201  84.629  1.00 21.42           O
ATOM   5698  CB  TYR B 312      -3.271  49.236  87.309  1.00 21.84           C
ATOM   5699  CG  TYR B 312      -2.300  49.015  88.438  1.00 21.16           C
ATOM   5700  CD1 TYR B 312      -1.126  48.311  88.243  1.00 21.32           C
ATOM   5701  CD2 TYR B 312      -2.560  49.534  89.719  1.00 22.67           C
ATOM   5702  CE1 TYR B 312      -0.229  48.119  89.280  1.00 22.50           C
ATOM   5703  CE2 TYR B 312      -1.645  49.349  90.763  1.00 22.14           C
ATOM   5704  CZ  TYR B 312      -0.494  48.643  90.528  1.00 22.14           C
ATOM   5705  OH  TYR B 312       0.394  48.460  91.537  1.00 23.35           O
ATOM   5706  N   ASN B 313      -0.520  50.613  86.001  1.00 21.20           N
ATOM   5707  CA  ASN B 313       0.760  50.409  85.377  1.00 21.45           C
ATOM   5708  C   ASN B 313       1.566  49.332  86.074  1.00 21.64           C
ATOM   5709  O   ASN B 313       2.083  49.531  87.188  1.00 20.17           O
ATOM   5710  CB  ASN B 313       1.530  51.747  85.356  1.00 21.84           C
ATOM   5711  CG  ASN B 313       2.970  51.571  84.960  1.00 23.63           C
ATOM   5712  OD1 ASN B 313       3.324  50.575  84.325  1.00 21.51           O
ATOM   5713  ND2 ASN B 313       3.825  52.552  85.327  1.00 25.64           N
ATOM   5714  N   CYS B 314       1.621  48.162  85.447  1.00 20.39           N
ATOM   5715  CA  CYS B 314       2.417  47.080  85.987  1.00 21.89           C
ATOM   5716  C   CYS B 314       3.809  47.408  85.494  1.00 21.94           C
ATOM   5717  O   CYS B 314       4.266  46.838  84.519  1.00 20.91           O
ATOM   5718  CB  CYS B 314       1.940  45.735  85.424  1.00 21.93           C
ATOM   5719  SG  CYS B 314       0.277  45.438  85.984  1.00 24.74           S
ATOM   5720  N   SER B 315       4.483  48.315  86.203  1.00 22.61           N
ATOM   5721  CA  SER B 315       5.797  48.785  85.788  1.00 22.88           C
ATOM   5722  C   SER B 315       7.076  47.968  85.940  1.00 22.20           C
ATOM   5723  O   SER B 315       7.358  47.376  87.004  1.00 21.27           O
ATOM   5724  CB  SER B 315       6.053  50.170  86.418  1.00 24.55           C
ATOM   5725  OG  SER B 315       7.277  50.701  85.930  1.00 23.54           O
ATOM   5726  N   PRO B 316       7.879  47.915  84.859  1.00 20.49           N
ATOM   5727  CA  PRO B 316       9.111  47.162  84.989  1.00 20.78           C
ATOM   5728  C   PRO B 316      10.029  47.966  85.918  1.00 20.37           C
ATOM   5729  O   PRO B 316      11.106  47.509  86.263  1.00 21.28           O
ATOM   5730  CB  PRO B 316       9.614  47.066  83.539  1.00 17.68           C
ATOM   5731  CG  PRO B 316       8.342  47.038  82.774  1.00 19.09           C
ATOM   5732  CD  PRO B 316       7.566  48.132  83.432  1.00 20.31           C
ATOM   5733  N   SER B 317       9.600  49.168  86.323  1.00 21.80           N
ATOM   5734  CA  SER B 317      10.421  49.976  87.241  1.00 22.69           C
ATOM   5735  C   SER B 317      10.357  49.416  88.676  1.00 24.23           C
ATOM   5736  O   SER B 317      11.079  49.878  89.558  1.00 23.01           O
ATOM   5737  CB  SER B 317       9.986  51.448  87.238  1.00 22.16           C
ATOM   5738  OG  SER B 317      10.418  52.080  86.050  1.00 23.46           O
ATOM   5739  N   PHE B 318       9.495  48.413  88.885  1.00 25.11           N
ATOM   5740  CA  PHE B 318       9.381  47.749  90.183  1.00 26.14           C
ATOM   5741  C   PHE B 318      10.270  46.513  90.122  1.00 28.62           C
ATOM   5742  O   PHE B 318      10.401  45.906  89.050  1.00 28.04           O
ATOM   5743  CB  PHE B 318       7.961  47.243  90.445  1.00 24.70           C
ATOM   5744  CG  PHE B 318       6.909  48.313  90.487  1.00 22.59           C
ATOM   5745  CD1 PHE B 318       7.175  49.564  91.048  1.00 22.30           C
ATOM   5746  CD2 PHE B 318       5.639  48.068  89.973  1.00 22.39           C
ATOM   5747  CE1 PHE B 318       6.184  50.558  91.094  1.00 21.33           C
ATOM   5748  CE2 PHE B 318       4.634  49.039  90.010  1.00 19.13           C
ATOM   5749  CZ  PHE B 318       4.902  50.296  90.571  1.00 21.63           C
ATOM   5750  N   ASN B 319      10.901  46.152  91.244  1.00 28.98           N
ATOM   5751  CA  ASN B 319      11.700  44.916  91.295  1.00 29.35           C
ATOM   5752  C   ASN B 319      10.612  43.954  91.769  1.00 29.87           C
ATOM   5753  O   ASN B 319      10.358  43.851  92.961  1.00 28.51           O
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| ATOM | 5754 | CB  | ASN | B | 319 | 12.816  | 45.033 | 92.333 | 1.00 | 31.00 | C |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 5755 | CG  | ASN | B | 319 | 13.759  | 43.841 | 92.316 | 1.00 | 30.19 | C |
| ATOM | 5756 | OD1 | ASN | B | 319 | 14.976  | 43.986 | 92.511 | 1.00 | 33.37 | O |
| ATOM | 5757 | ND2 | ASN | B | 319 | 13.213  | 42.665 | 92.085 | 1.00 | 25.99 | N |
| ATOM | 5758 | N   | TRP | B | 320 | 9.951   | 43.277 | 90.827 | 1.00 | 29.46 | N |
| ATOM | 5759 | CA  | TRP | B | 320 | 8.825   | 42.421 | 91.157 | 1.00 | 30.24 | C |
| ATOM | 5760 | C   | TRP | B | 320 | 8.994   | 41.342 | 92.215 | 1.00 | 31.86 | C |
| ATOM | 5761 | O   | TRP | B | 320 | 8.230   | 41.302 | 93.164 | 1.00 | 32.47 | O |
| ATOM | 5762 | CB  | TRP | B | 320 | 8.217   | 41.827 | 89.877 | 1.00 | 28.13 | C |
| ATOM | 5763 | CG  | TRP | B | 320 | 7.466   | 42.890 | 89.090 | 1.00 | 25.74 | C |
| ATOM | 5764 | CD1 | TRP | B | 320 | 8.018   | 43.872 | 88.308 | 1.00 | 26.06 | C |
| ATOM | 5765 | CD2 | TRP | B | 320 | 6.064   | 43.156 | 89.127 | 1.00 | 24.13 | C |
| ATOM | 5766 | NE1 | TRP | B | 320 | 7.040   | 44.742 | 87.860 | 1.00 | 22.66 | N |
| ATOM | 5767 | CE2 | TRP | B | 320 | 5.833   | 44.326 | 88.346 | 1.00 | 26.17 | C |
| ATOM | 5768 | CE3 | TRP | B | 320 | 4.978   | 42.537 | 89.743 | 1.00 | 26.50 | C |
| ATOM | 5769 | CZ2 | TRP | B | 320 | 4.576   | 44.865 | 88.170 | 1.00 | 24.67 | C |
| ATOM | 5770 | CZ3 | TRP | B | 320 | 3.716   | 43.085 | 89.571 | 1.00 | 22.71 | C |
| ATOM | 5771 | CH2 | TRP | B | 320 | 3.529   | 44.235 | 88.789 | 1.00 | 29.26 | C |
| ATOM | 5772 | N   | LYS | B | 321 | 9.986   | 40.475 | 92.091 | 1.00 | 35.22 | N |
| ATOM | 5773 | CA  | LYS | B | 321 | 10.102  | 39.453 | 93.123 | 1.00 | 37.81 | C |
| ATOM | 5774 | C   | LYS | B | 321 | 10.670  | 39.965 | 94.441 | 1.00 | 39.47 | C |
| ATOM | 5775 | O   | LYS | B | 321 | 10.637  | 39.254 | 95.447 | 1.00 | 40.71 | O |
| ATOM | 5776 | CB  | LYS | B | 321 | 10.872  | 38.231 | 92.604 | 1.00 | 38.20 | C |
| ATOM | 5777 | CG  | LYS | B | 321 | 9.968   | 37.320 | 91.757 | 1.00 | 38.81 | C |
| ATOM | 5778 | CD  | LYS | B | 321 | 10.699  | 36.137 | 91.100 | 1.00 | 41.32 | C |
| ATOM | 5779 | CE  | LYS | B | 321 | 11.173  | 35.105 | 92.134 | 1.00 | 40.60 | C |
| ATOM | 5780 | NZ  | LYS | B | 321 | 10.034  | 34.707 | 93.024 | 1.00 | 42.34 | N |
| ATOM | 5781 | N   | LYS | B | 322 | 11.170  | 41.197 | 94.468 | 1.00 | 40.11 | N |
| ATOM | 5782 | CA  | LYS | B | 322 | 11.688  | 41.730 | 95.727 | 1.00 | 41.32 | C |
| ATOM | 5783 | C   | LYS | B | 322 | 10.499  | 42.044 | 96.616 | 1.00 | 40.91 | C |
| ATOM | 5784 | O   | LYS | B | 322 | 10.583  | 41.997 | 97.836 | 1.00 | 40.67 | O |
| ATOM | 5785 | CB  | LYS | B | 322 | 12.490  | 43.011 | 95.494 | 1.00 | 42.05 | C |
| ATOM | 5786 | CG  | LYS | B | 322 | 12.772  | 43.808 | 96.767 | 1.00 | 44.07 | C |
| ATOM | 5787 | CD  | LYS | B | 322 | 13.481  | 45.130 | 96.464 | 1.00 | 45.23 | C |
| ATOM | 5788 | CE  | LYS | B | 322 | 13.910  | 45.853 | 97.733 | 1.00 | 46.07 | C |
| ATOM | 5789 | NZ  | LYS | B | 322 | 15.372  | 46.160 | 97.655 | 1.00 | 46.83 | N |
| ATOM | 5790 | N   | HIS | B | 323 | 9.376   | 42.352 | 95.988 | 1.00 | 41.24 | N |
| ATOM | 5791 | CA  | HIS | B | 323 | 8.171   | 42.710 | 96.718 | 1.00 | 41.84 | C |
| ATOM | 5792 | C   | HIS | B | 323 | 7.128   | 41.607 | 96.842 | 1.00 | 41.90 | C |
| ATOM | 5793 | O   | HIS | B | 323 | 6.550   | 41.419 | 97.911 | 1.00 | 40.74 | O |
| ATOM | 5794 | CB  | HIS | B | 323 | 7.509   | 43.922 | 96.061 | 1.00 | 43.42 | C |
| ATOM | 5795 | CG  | HIS | B | 323 | 8.357   | 45.152 | 96.080 | 1.00 | 45.20 | C |
| ATOM | 5796 | ND1 | HIS | B | 323 | 8.441   | 45.982 | 97.178 | 1.00 | 45.90 | N |
| ATOM | 5797 | CD2 | HIS | B | 323 | 9.216   | 45.657 | 95.161 | 1.00 | 46.15 | C |
| ATOM | 5798 | CE1 | HIS | B | 323 | 9.316   | 46.941 | 96.937 | 1.00 | 46.27 | C |
| ATOM | 5799 | NE2 | HIS | B | 323 | 9.802   | 46.767 | 95.720 | 1.00 | 46.64 | N |
| ATOM | 5800 | N   | LEU | B | 324 | 6.891   | 40.879 | 95.756 | 1.00 | 40.55 | N |
| ATOM | 5801 | CA  | LEU | B | 324 | 5.867   | 39.851 | 95.771 | 1.00 | 39.81 | C |
| ATOM | 5802 | C   | LEU | B | 324 | 6.393   | 38.444 | 95.565 | 1.00 | 39.41 | C |
| ATOM | 5803 | O   | LEU | B | 324 | 7.523   | 38.246 | 95.114 | 1.00 | 39.13 | O |
| ATOM | 5804 | CB  | LEU | B | 324 | 4.812   | 40.181 | 94.708 | 1.00 | 38.64 | C |
| ATOM | 5805 | CG  | LEU | B | 324 | 4.242   | 41.604 | 94.733 | 1.00 | 37.90 | C |
| ATOM | 5806 | CD1 | LEU | B | 324 | 3.392   | 41.827 | 93.498 | 1.00 | 36.26 | C |
| ATOM | 5807 | CD2 | LEU | B | 324 | 3.442   | 41.844 | 95.995 | 1.00 | 36.83 | C |
| ATOM | 5808 | N   | ASP | B | 325 | 5.585   | 37.459 | 95.948 | 1.00 | 39.75 | N |
| ATOM | 5809 | CA  | ASP | B | 325 | 5.973   | 36.066 | 95.751 | 1.00 | 40.21 | C |
| ATOM | 5810 | C   | ASP | B | 325 | 5.203   | 35.599 | 94.540 | 1.00 | 39.32 | C |
| ATOM | 5811 | O   | ASP | B | 325 | 4.193   | 36.206 | 94.163 | 1.00 | 39.21 | O |
| ATOM | 5812 | CB  | ASP | B | 325 | 5.638   | 35.185 | 96.964 | 1.00 | 41.90 | C |
| ATOM | 5813 | CG  | ASP | B | 325 | 4.229   | 35.415 | 97.493 | 1.00 | 42.24 | C |
| ATOM | 5814 | OD1 | ASP | B | 325 | 3.305   | 35.645 | 96.687 | 1.00 | 42.35 | O |
| ATOM | 5815 | OD2 | ASP | B | 325 | 4.053   | 35.350 | 98.731 | 1.00 | 44.42 | O |
| ATOM | 5816 | N   | ASP | B | 326 | 5.666   | 34.513 | 93.943 | 1.00 | 38.41 | N |
| ATOM | 5817 | CA  | ASP | B | 326 | 5.041   | 33.988 | 92.737 | 1.00 | 37.55 | C |
| ATOM | 5818 | C   | ASP | B | 326 | 3.521   | 33.868 | 92.777 | 1.00 | 37.00 | C |
| ATOM | 5819 | O   | ASP | B | 326 | 2.847   | 34.229 | 91.813 | 1.00 | 35.07 | O |
| ATOM | 5820 | CB  | ASP | B | 326 | 5.679   | 32.657 | 92.364 | 1.00 | 38.12 | C |
| ATOM | 5821 | CG  | ASP | B | 326 | 7.162   | 32.775 | 92.190 | 1.00 | 40.42 | C |
| ATOM | 5822 | OD1 | ASP | B | 326 | 7.629   | 33.862 | 91.779 | 1.00 | 42.97 | O |
| ATOM | 5823 | OD2 | ASP | B | 326 | 7.878   | 31.796 | 92.459 | 1.00 | 41.84 | O |
| ATOM | 5824 | N   | ALA | B | 327 | 2.965   | 33.386 | 93.887 | 1.00 | 35.58 | N |
| ATOM | 5825 | CA  | ALA | B | 327 | 1.515   | 33.249 | 93.951 | 1.00 | 33.55 | C |
| ATOM | 5826 | C   | ALA | B | 327 | 0.787   | 34.588 | 93.725 | 1.00 | 31.69 | C |
| ATOM | 5827 | O   | ALA | B | 327 | -0.195  | 34.677 | 92.985 | 1.00 | 30.96 | O |
| ATOM | 5828 | CB  | ALA | B | 327 | 1.121   | 32.632 | 95.294 | 1.00 | 34.71 | C |
| ATOM | 5829 | N   | THR | B | 328 | 1.269   | 35.631 | 94.378 | 1.00 | 31.97 | N |
| ATOM | 5830 | CA  | THR | B | 328 | 0.681   | 36.969 | 94.239 | 1.00 | 30.41 | C |
| ATOM | 5831 | C   | THR | B | 328 | 0.972   | 37.530 | 92.826 | 1.00 | 29.96 | C |
| ATOM | 5832 | O   | THR | B | 328 | 0.112   | 38.155 | 92.206 | 1.00 | 26.82 | O |
| ATOM | 5833 | CB  | THR | B | 328 | 1.278   | 37.922 | 95.297 | 1.00 | 31.58 | C |

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ATOM   5834  OG1 THR B 328       1.271  37.262  96.576  1.00 31.65        O
ATOM   5835  CG2 THR B 328       0.464  39.222  95.389  1.00 30.29        C
ATOM   5836  N   ILE B 329       2.187  37.310  92.334  1.00 29.65        N
ATOM   5837  CA  ILE B 329       2.553  37.775  90.993  1.00 30.70        C
ATOM   5838  C   ILE B 329       1.609  37.134  89.980  1.00 32.06        C
ATOM   5839  O   ILE B 329       1.119  37.780  89.035  1.00 31.04        O
ATOM   5840  CB  ILE B 329       4.013  37.386  90.674  1.00 31.08        C
ATOM   5841  CG1 ILE B 329       4.964  38.338  91.417  1.00 29.60        C
ATOM   5842  CG2 ILE B 329       4.256  37.390  89.184  1.00 30.20        C
ATOM   5843  CD1 ILE B 329       6.440  37.900  91.363  1.00 31.60        C
ATOM   5844  N   ALA B 330       1.335  35.853  90.204  1.00 30.89        N
ATOM   5845  CA  ALA B 330       0.466  35.110  89.321  1.00 31.34        C
ATOM   5846  C   ALA B 330      -0.951  35.650  89.264  1.00 30.32        C
ATOM   5847  O   ALA B 330      -1.559  35.664  88.212  1.00 32.13        O
ATOM   5848  CB  ALA B 330       0.445  33.646  89.738  1.00 31.05        C
ATOM   5849  N   LYS B 331      -1.475' 36.113  90.390  1.00 30.45        N
ATOM   5850  CA  LYS B 331      -2.853  36.601  90.438  1.00 28.75        C
ATOM   5851  C   LYS B 331      -2.930  38.105  90.344  1.00 29.46        C
ATOM   5852  O   LYS B 331      -4.020  38.677  90.335  1.00 27.46        O
ATOM   5853  CB  LYS B 331      -3.479  36.210  91.782  1.00 31.24        C
ATOM   5854  CG  LYS B 331      -2.867  36.990  92.962  1.00 31.04        C
ATOM   5855  CD  LYS B 331      -3.619  36.784  94.278  1.00 33.89        C
ATOM   5856  CE  LYS B 331      -3.018  35.661  95.102  1.00 34.67        C
ATOM   5857  NZ  LYS B 331      -3.723  35.509  96.420  1.00 34.57        N
ATOM   5858  N   PHE B 332      -1.774  38.755  90.297  1.00 28.89        N
ATOM   5859  CA  PHE B 332      -1.780  40.204  90.304  1.00 28.78        C
ATOM   5860  C   PHE B 332      -2.842  40.885  89.445  1.00 27.68        C
ATOM   5861  O   PHE B 332      -3.721  41.569  89.972  1.00 26.97        O
ATOM   5862  CB  PHE B 332      -0.389  40.731  89.975  1.00 28.30        C
ATOM   5863  CG  PHE B 332      -0.160  42.144  90.464  1.00 30.22        C
ATOM   5864  CD1 PHE B 332       0.111  42.391  91.809  1.00 30.46        C
ATOM   5865  CD2 PHE B 332      -0.232  43.222  89.577  1.00 30.74        C
ATOM   5866  CE1 PHE B 332       0.311  43.695  92.269  1.00 32.36        C
ATOM   5867  CE2 PHE B 332      -0.039  44.517  90.014  1.00 30.77        C
ATOM   5868  CZ  PHE B 332       0.232  44.765  91.357  1.00 32.16        C
ATOM   5869  N   GLN B 333      -2.803  40.683  88.124  1.00 29.07        N
ATOM   5870  CA  GLN B 333      -3.768  41.352  87.241  1.00 27.31        C
ATOM   5871  C   GLN B 333      -5.230  40.962  87.426  1.00 28.96        C
ATOM   5872  O   GLN B 333      -6.139  41.817  87.287  1.00 28.45        O
ATOM   5873  CB  GLN B 333      -3.380  41.168  85.758  1.00 28.21        C
ATOM   5874  CG  GLN B 333      -2.044  41.809  85.370  1.00 25.64        C
ATOM   5875  CD  GLN B 333      -1.898  42.110  83.866  1.00 27.21        C
ATOM   5876  OE1 GLN B 333      -2.571  41.512  83.010  1.00 22.85        O
ATOM   5877  NE2 GLN B 333      -0.996  43.042  83.543  1.00 24.94        N
ATOM   5878  N   LYS B 334      -5.475  39.684  87.720  1.00 29.19        N
ATOM   5879  CA  LYS B 334      -6.856  39.253  87.905  1.00 31.06        C
ATOM   5880  C   LYS B 334      -7.409  39.937  89.162  1.00 29.50        C
ATOM   5881  O   LYS B 334      -8.557  40.377  89.190  1.00 27.85        O
ATOM   5882  CB  LYS B 334      -6.934  37.728  88.044  1.00 33.21        C
ATOM   5883  CG  LYS B 334      -8.321  37.163  87.704  1.00 36.14        C
ATOM   5884  CD  LYS B 334      -8.361  35.644  87.864  1.00 39.76        C
ATOM   5885  CE  LYS B 334      -9.636  35.041  87.262  1.00 40.57        C
ATOM   5886  NZ  LYS B 334     -10.860  35.838  87.619  1.00 41.07        N
ATOM   5887  N   GLU B 335      -6.576  40.043  90.191  1.00 29.17        N
ATOM   5888  CA  GLU B 335      -7.012  40.692  91.416  1.00 31.38        C
ATOM   5889  C   GLU B 335      -7.415  42.145  91.131  1.00 31.23        C
ATOM   5890  O   GLU B 335      -8.503  42.592  91.516  1.00 30.09        O
ATOM   5891  CB  GLU B 335      -5.890  40.642  92.447  1.00 32.84        C
ATOM   5892  CG  GLU B 335      -5.707  39.267  93.075  1.00 36.20        C
ATOM   5893  CD  GLU B 335      -6.919  38.887  93.899  1.00 39.52        C
ATOM   5894  OE1 GLU B 335      -6.957  39.250  95.101  1.00 42.94        O
ATOM   5895  OE2 GLU B 335      -7.845  38.265  93.330  1.00 39.55        O
ATOM   5896  N   LEU B 336      -6.525  42.869  90.445  1.00 30.78        N
ATOM   5897  CA  LEU B 336      -6.751  44.270  90.084  1.00 29.73        C
ATOM   5898  C   LEU B 336      -8.010  44.474  89.264  1.00 28.98        C
ATOM   5899  O   LEU B 336      -8.718  45.461  89.440  1.00 26.97        O
ATOM   5900  CB  LEU B 336      -5.571  44.799  89.275  1.00 29.03        C
ATOM   5901  CG  LEU B 336      -4.319  45.072  90.073  1.00 28.88        C
ATOM   5902  CD1 LEU B 336      -3.244  45.499  89.098  1.00 29.97        C
ATOM   5903  CD2 LEU B 336      -4.608  46.168  91.097  1.00 30.37        C
ATOM   5904  N   ALA B 337      -8.252  43.560  88.320  1.00 29.20        N
ATOM   5905  CA  ALA B 337      -9.432  43.657  87.465  1.00 30.58        C
ATOM   5906  C   ALA B 337     -10.675  43.650  88.353  1.00 30.86        C
ATOM   5907  O   ALA B 337     -11.596  44.429  88.142  1.00 29.93        O
ATOM   5908  CB  ALA B 337      -9.491  42.466  86.444  1.00 27.84        C
ATOM   5909  N   ALA B 338     -10.681  42.764  89.348  1.00 32.67        N
ATOM   5910  CA  ALA B 338     -11.822  42.664  90.276  1.00 34.33        C
ATOM   5911  C   ALA B 338     -12.067  44.004  90.967  1.00 35.82        C
ATOM   5912  O   ALA B 338     -13.217  44.362  91.251  1.00 36.18        O
ATOM   5913  CB  ALA B 338     -11.557  41.578  91.320  1.00 35.24        C
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ATOM   5914  N    MET B 339     -10.983   44.749   91.220  1.00 35.29           N
ATOM   5915  CA   MET B 339     -11.074   46.060   91.871  1.00 34.31           C
ATOM   5916  C    MET B 339     -11.558   47.147   90.910  1.00 33.98           C
ATOM   5917  O    MET B 339     -11.858   48.261   91.331  1.00 33.85           O
ATOM   5918  CB   MET B 339      -9.707   46.468   92.408  1.00 34.21           C
ATOM   5919  CG   MET B 339      -9.354   45.969   93.782  1.00 35.49           C
ATOM   5920  SD   MET B 339      -7.549   45.958   94.054  1.00 36.23           S
ATOM   5921  CE   MET B 339      -7.358   44.315   94.733  1.00 36.86           C
ATOM   5922  N    GLY B 340     -11.620   46.848   89.612  1.00 32.58           N
ATOM   5923  CA   GLY B 340     -12.055   47.874   88.678  1.00 30.36           C
ATOM   5924  C    GLY B 340     -10.945   48.461   87.798  1.00 29.49           C
ATOM   5925  O    GLY B 340     -11.149   49.472   87.128  1.00 27.83           O
ATOM   5926  N    PHE B 341      -9.767   47.843   87.816  1.00 28.73           N
ATOM   5927  CA   PHE B 341      -8.666   48.315   86.969  1.00 27.76           C
ATOM   5928  C    PHE B 341      -8.842   47.584   85.638  1.00 26.23           C
ATOM   5929  O    PHE B 341      -8.363   46.455   85.457  1.00 27.29           O
ATOM   5930  CB   PHE B 341      -7.333   47.990   87.622  1.00 27.54           C
ATOM   5931  CG   PHE B 341      -7.061   48.795   88.863  1.00 29.38           C
ATOM   5932  CD1  PHE B 341      -6.645   50.119   88.771  1.00 29.12           C
ATOM   5933  CD2  PHE B 341      -7.255   48.236   90.131  1.00 28.64           C
ATOM   5934  CE1  PHE B 341      -6.422   50.881   89.919  1.00 29.91           C
ATOM   5935  CE2  PHE B 341      -7.042   48.980   91.285  1.00 30.03           C
ATOM   5936  CZ   PHE B 341      -6.620   50.314   91.183  1.00 31.00           C
ATOM   5937  N    LYS B 342      -9.553   48.239   84.731  1.00 25.56           N
ATOM   5938  CA   LYS B 342      -9.889   47.665   83.437  1.00 25.26           C
ATOM   5939  C    LYS B 342      -8.858   47.753   82.318  1.00 25.93           C
ATOM   5940  O    LYS B 342      -8.962   47.027   81.313  1.00 22.27           O
ATOM   5941  CB   LYS B 342     -11.235   48.216   82.973  1.00 27.06           C
ATOM   5942  CG   LYS B 342     -12.389   47.783   83.872  1.00 29.79           C
ATOM   5943  CD   LYS B 342     -12.344   46.290   84.107  1.00 31.20           C
ATOM   5944  CE   LYS B 342     -13.395   45.838   85.103  1.00 35.25           C
ATOM   5945  NZ   LYS B 342     -13.239   44.390   85.453  1.00 36.62           N
ATOM   5946  N    PHE B 343      -7.871   48.633   82.485  1.00 24.72           N
ATOM   5947  CA   PHE B 343      -6.805   48.748   81.495  1.00 23.38           C
ATOM   5948  C    PHE B 343      -5.506   48.571   82.275  1.00 22.99           C
ATOM   5949  O    PHE B 343      -5.208   49.352   83.185  1.00 24.53           O
ATOM   5950  CB   PHE B 343      -6.832   50.115   80.784  1.00 22.20           C
ATOM   5951  CG   PHE B 343      -5.813   50.211   79.677  1.00 23.12           C
ATOM   5952  CD1  PHE B 343      -5.819   49.280   78.636  1.00 21.74           C
ATOM   5953  CD2  PHE B 343      -4.804   51.172   79.703  1.00 23.56           C
ATOM   5954  CE1  PHE B 343      -4.833   49.302   77.640  1.00 24.54           C
ATOM   5955  CE2  PHE B 343      -3.817   51.190   78.711  1.00 23.37           C
ATOM   5956  CZ   PHE B 343      -3.831   50.257   77.685  1.00 20.98           C
ATOM   5957  N    GLN B 344      -4.765   47.511   81.975  1.00 22.92           N
ATOM   5958  CA   GLN B 344      -3.524   47.226   82.681  1.00 23.84           C
ATOM   5959  C    GLN B 344      -2.423   47.126   81.654  1.00 24.22           C
ATOM   5960  O    GLN B 344      -2.631   46.568   80.581  1.00 26.53           O
ATOM   5961  CB   GLN B 344      -3.661   45.928   83.467  1.00 23.11           C
ATOM   5962  CG   GLN B 344      -4.764   46.044   84.539  1.00 23.26           C
ATOM   5963  CD   GLN B 344      -4.881   44.805   85.415  1.00 24.31           C
ATOM   5964  OE1  GLN B 344      -5.973   44.447   85.831  1.00 25.85           O
ATOM   5965  NE2  GLN B 344      -3.758   44.171   85.713  1.00 19.72           N
ATOM   5966  N    PHE B 345      -1.234   47.615   81.981  1.00 22.84           N
ATOM   5967  CA   PHE B 345      -0.201   47.619   80.966  1.00 21.32           C
ATOM   5968  C    PHE B 345       1.194   47.585   81.534  1.00 20.77           C
ATOM   5969  O    PHE B 345       1.432   48.101   82.626  1.00 21.20           O
ATOM   5970  CB   PHE B 345      -0.381   48.857   80.058  1.00 22.25           C
ATOM   5971  CG   PHE B 345      -0.521   50.171   80.812  1.00 21.49           C
ATOM   5972  CD1  PHE B 345      -1.705   50.496   81.453  1.00 23.12           C
ATOM   5973  CD2  PHE B 345       0.562   51.053   80.922  1.00 20.90           C
ATOM   5974  CE1  PHE B 345      -1.832   51.670   82.203  1.00 22.28           C
ATOM   5975  CE2  PHE B 345       0.461   52.246   81.678  1.00 20.29           C
ATOM   5976  CZ   PHE B 345      -0.738   52.557   82.321  1.00 20.50           C
ATOM   5977  N    ILE B 346       2.086   46.900   80.818  1.00 18.80           N
ATOM   5978  CA   ILE B 346       3.500   46.845   81.211  1.00 18.76           C
ATOM   5979  C    ILE B 346       4.155   47.899   80.297  1.00 18.70           C
ATOM   5980  O    ILE B 346       4.450   47.662   79.113  1.00 17.59           O
ATOM   5981  CB   ILE B 346       4.087   45.463   80.970  1.00 16.91           C
ATOM   5982  CG1  ILE B 346       3.246   44.427   81.766  1.00 16.86           C
ATOM   5983  CG2  ILE B 346       5.526   45.419   81.460  1.00 18.48           C
ATOM   5984  CD1  ILE B 346       3.908   43.060   81.906  1.00 19.50           C
ATOM   5985  N    THR B 347       4.309   49.096   80.849  1.00 19.87           N
ATOM   5986  CA   THR B 347       4.867   50.221   80.093  1.00 19.60           C
ATOM   5987  C    THR B 347       6.135   49.930   79.277  1.00 18.77           C
ATOM   5988  O    THR B 347       6.206   50.193   78.083  1.00 16.12           O
ATOM   5989  CB   THR B 347       5.195   51.381   81.064  1.00 20.24           C
ATOM   5990  OG1  THR B 347       5.896   50.838   82.200  1.00 19.05           O
ATOM   5991  CG2  THR B 347       3.897   52.074   81.549  1.00 20.94           C
ATOM   5992  N    LEU B 348       7.143   49.389   79.941  1.00 19.69           N
ATOM   5993  CA   LEU B 348       8.432   49.180   79.312  1.00 18.03           C
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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 5994 | C | LEU | B | 348 | 8.707 | 47.764 | 78.812 | 1.00 | 18.03 | C |
| ATOM | 5995 | O | LEU | B | 348 | 9.857 | 47.375 | 78.647 | 1.00 | 16.98 | O |
| ATOM | 5996 | CB | LEU | B | 348 | 9.514 | 49.617 | 80.309 | 1.00 | 17.79 | C |
| ATOM | 5997 | CG | LEU | B | 348 | 9.244 | 50.973 | 80.980 | 1.00 | 18.31 | C |
| ATOM | 5998 | CD1 | LEU | B | 348 | 10.544 | 51.387 | 81.712 | 1.00 | 17.95 | C |
| ATOM | 5999 | CD2 | LEU | B | 348 | 8.842 | 52.035 | 79.954 | 1.00 | 18.61 | C |
| ATOM | 6000 | N | ALA | B | 349 | 7.646 | 47.011 | 78.561 | 1.00 | 16.75 | N |
| ATOM | 6001 | CA | ALA | B | 349 | 7.793 | 45.622 | 78.085 | 1.00 | 17.52 | C |
| ATOM | 6002 | C | ALA | B | 349 | 8.703 | 45.497 | 76.847 | 1.00 | 17.44 | C |
| ATOM | 6003 | O | ALA | B | 349 | 9.610 | 44.620 | 76.768 | 1.00 | 18.14 | O |
| ATOM | 6004 | CB | ALA | B | 349 | 6.404 | 45.057 | 77.788 | 1.00 | 19.10 | C |
| ATOM | 6005 | N | GLY | B | 350 | 8.482 | 46.390 | 75.889 | 1.00 | 17.99 | N |
| ATOM | 6006 | CA | GLY | B | 350 | 9.266 | 46.359 | 74.663 | 1.00 | 17.81 | C |
| ATOM | 6007 | C | GLY | B | 350 | 10.727 | 46.668 | 74.826 | 1.00 | 16.15 | C |
| ATOM | 6008 | O | GLY | B | 350 | 11.566 | 45.997 | 74.223 | 1.00 | 17.41 | O |
| ATOM | 6009 | N | PHE | B | 351 | 11.040 | 47.704 | 75.619 | 1.00 | 16.26 | N |
| ATOM | 6010 | CA | PHE | B | 351 | 12.428 | 48.089 | 75.876 | 1.00 | 14.78 | C |
| ATOM | 6011 | C | PHE | B | 351 | 13.160 | 46.871 | 76.448 | 1.00 | 16.88 | C |
| ATOM | 6012 | O | PHE | B | 351 | 14.255 | 46.530 | 76.006 | 1.00 | 16.43 | O |
| ATOM | 6013 | CB | PHE | B | 351 | 12.495 | 49.241 | 76.903 | 1.00 | 15.18 | C |
| ATOM | 6014 | CG | PHE | B | 351 | 13.895 | 49.521 | 77.445 | 1.00 | 17.27 | C |
| ATOM | 6015 | CD1 | PHE | B | 351 | 14.757 | 50.388 | 76.784 | 1.00 | 16.81 | C |
| ATOM | 6016 | CD2 | PHE | B | 351 | 14.371 | 48.845 | 78.587 | 1.00 | 17.22 | C |
| ATOM | 6017 | CE1 | PHE | B | 351 | 16.078 | 50.573 | 77.234 | 1.00 | 16.84 | C |
| ATOM | 6018 | CE2 | PHE | B | 351 | 15.683 | 49.029 | 79.022 | 1.00 | 16.98 | C |
| ATOM | 6019 | CZ | PHE | B | 351 | 16.528 | 49.880 | 78.347 | 1.00 | 16.88 | C |
| ATOM | 6020 | N | HIS | B | 352 | 12.585 | 46.234 | 77.450 | 1.00 | 17.72 | N |
| ATOM | 6021 | CA | HIS | B | 352 | 13.284 | 45.068 | 78.017 | 1.00 | 16.88 | C |
| ATOM | 6022 | C | HIS | B | 352 | 13.333 | 43.834 | 77.109 | 1.00 | 16.95 | C |
| ATOM | 6023 | O | HIS | B | 352 | 14.364 | 43.191 | 77.027 | 1.00 | 17.00 | O |
| ATOM | 6024 | CB | HIS | B | 352 | 12.698 | 44.713 | 79.360 | 1.00 | 17.43 | C |
| ATOM | 6025 | CG | HIS | B | 352 | 13.028 | 45.710 | 80.417 | 1.00 | 17.44 | C |
| ATOM | 6026 | ND1 | HIS | B | 352 | 14.262 | 45.753 | 81.032 | 1.00 | 17.46 | N |
| ATOM | 6027 | CD2 | HIS | B | 352 | 12.306 | 46.725 | 80.933 | 1.00 | 17.84 | C |
| ATOM | 6028 | CE1 | HIS | B | 352 | 14.279 | 46.755 | 81.889 | 1.00 | 17.81 | C |
| ATOM | 6029 | NE2 | HIS | B | 352 | 13.104 | 47.359 | 81.846 | 1.00 | 18.58 | N |
| ATOM | 6030 | N | ALA | B | 353 | 12.242 | 43.511 | 76.430 | 1.00 | 17.46 | N |
| ATOM | 6031 | CA | ALA | B | 353 | 12.231 | 42.371 | 75.497 | 1.00 | 18.85 | C |
| ATOM | 6032 | C | ALA | B | 353 | 13.293 | 42.585 | 74.407 | 1.00 | 19.86 | C |
| ATOM | 6033 | O | ALA | B | 353 | 14.050 | 41.650 | 74.042 | 1.00 | 20.91 | O |
| ATOM | 6034 | CB | ALA | B | 353 | 10.868 | 42.249 | 74.876 | 1.00 | 17.44 | C |
| ATOM | 6035 | N | LEU | B | 354 | 13.369 | 43.818 | 73.877 | 1.00 | 18.12 | N |
| ATOM | 6036 | CA | LEU | B | 354 | 14.346 | 44.129 | 72.827 | 1.00 | 18.16 | C |
| ATOM | 6037 | C | LEU | B | 354 | 15.783 | 44.141 | 73.342 | 1.00 | 18.52 | C |
| ATOM | 6038 | O | LEU | B | 354 | 16.670 | 43.548 | 72.733 | 1.00 | 19.02 | O |
| ATOM | 6039 | CB | LEU | B | 354 | 14.048 | 45.506 | 72.159 | 1.00 | 17.66 | C |
| ATOM | 6040 | CG | LEU | B | 354 | 14.922 | 46.061 | 71.009 | 1.00 | 14.91 | C |
| ATOM | 6041 | CD1 | LEU | B | 354 | 14.152 | 47.146 | 70.226 | 1.00 | 17.76 | C |
| ATOM | 6042 | CD2 | LEU | B | 354 | 16.210 | 46.667 | 71.541 | 1.00 | 16.86 | C |
| ATOM | 6043 | N | ASN | B | 355 | 16.019 | 44.806 | 74.471 | 1.00 | 18.76 | N |
| ATOM | 6044 | CA | ASN | B | 355 | 17.381 | 44.900 | 74.974 | 1.00 | 19.40 | C |
| ATOM | 6045 | C | ASN | B | 355 | 17.928 | 43.541 | 75.416 | 1.00 | 18.85 | C |
| ATOM | 6046 | O | ASN | B | 355 | 19.052 | 43.201 | 75.100 | 1.00 | 20.21 | O |
| ATOM | 6047 | CB | ASN | B | 355 | 17.471 | 45.917 | 76.124 | 1.00 | 18.77 | C |
| ATOM | 6048 | CG | ASN | B | 355 | 17.616 | 47.377 | 75.619 | 1.00 | 18.45 | C |
| ATOM | 6049 | OD1 | ASN | B | 355 | 18.723 | 47.888 | 75.472 | 1.00 | 19.30 | O |
| ATOM | 6050 | ND2 | ASN | B | 355 | 16.491 | 48.027 | 75.354 | 1.00 | 16.63 | N |
| ATOM | 6051 | N | TYR | B | 356 | 17.102 | 42.765 | 76.093 | 1.00 | 18.90 | N |
| ATOM | 6052 | CA | TYR | B | 356 | 17.533 | 41.467 | 76.602 | 1.00 | 22.08 | C |
| ATOM | 6053 | C | TYR | B | 356 | 17.779 | 40.456 | 75.493 | 1.00 | 22.16 | C |
| ATOM | 6054 | O | TYR | B | 356 | 18.850 | 39.841 | 75.428 | 1.00 | 21.52 | O |
| ATOM | 6055 | CB | TYR | B | 356 | 16.503 | 40.915 | 77.599 | 1.00 | 21.58 | C |
| ATOM | 6056 | CG | TYR | B | 356 | 16.933 | 39.542 | 78.072 | 1.00 | 24.84 | C |
| ATOM | 6057 | CD1 | TYR | B | 356 | 18.100 | 39.393 | 78.810 | 1.00 | 25.17 | C |
| ATOM | 6058 | CD2 | TYR | B | 356 | 16.261 | 38.383 | 77.650 | 1.00 | 26.33 | C |
| ATOM | 6059 | CE1 | TYR | B | 356 | 18.631 | 38.115 | 79.122 | 1.00 | 27.85 | C |
| ATOM | 6060 | CE2 | TYR | B | 356 | 16.777 | 37.088 | 77.968 | 1.00 | 30.02 | C |
| ATOM | 6061 | CZ | TYR | B | 356 | 17.974 | 36.978 | 78.704 | 1.00 | 30.08 | C |
| ATOM | 6062 | OH | TYR | B | 356 | 18.541 | 35.737 | 79.012 | 1.00 | 31.42 | O |
| ATOM | 6063 | N | SER | B | 357 | 16.779 | 40.273 | 74.631 | 1.00 | 22.34 | N |
| ATOM | 6064 | CA | SER | B | 357 | 16.900 | 39.350 | 73.510 | 1.00 | 22.69 | C |
| ATOM | 6065 | C | SER | B | 357 | 18.134 | 39.641 | 72.668 | 1.00 | 22.91 | C |
| ATOM | 6066 | O | SER | B | 357 | 18.819 | 38.713 | 72.231 | 1.00 | 23.10 | O |
| ATOM | 6067 | CB | SER | B | 357 | 15.617 | 39.372 | 72.649 | 1.00 | 21.70 | C |
| ATOM | 6068 | OG | SER | B | 357 | 15.393 | 40.606 | 71.974 | 1.00 | 23.36 | O |
| ATOM | 6069 | N | MET | B | 358 | 18.464 | 40.919 | 72.452 | 1.00 | 22.19 | N |
| ATOM | 6070 | CA | MET | B | 358 | 19.650 | 41.225 | 71.664 | 1.00 | 22.49 | C |
| ATOM | 6071 | C | MET | B | 358 | 20.925 | 41.020 | 72.464 | 1.00 | 22.82 | C |
| ATOM | 6072 | O | MET | B | 358 | 21.938 | 40.598 | 71.889 | 1.00 | 21.76 | O |
| ATOM | 6073 | CB | MET | B | 358 | 19.609 | 42.651 | 71.069 | 1.00 | 20.36 | C |

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ATOM   6074  CG   MET B 358     20.803  42.945  70.118  1.00 20.55           C
ATOM   6075  SD   MET B 358     21.058  41.696  68.778  1.00 21.56           S
ATOM   6076  CE   MET B 358     19.529  41.949  67.799  1.00 22.01           C
ATOM   6077  N    PHE B 359     20.898  41.314  73.775  1.00 22.67           N
ATOM   6078  CA   PHE B 359     22.103  41.084  74.577  1.00 22.78           C
ATOM   6079  C    PHE B 359     22.371  39.574  74.528  1.00 23.69           C
ATOM   6080  O    PHE B 359     23.499  39.140  74.245  1.00 23.96           O
ATOM   6081  CB   PHE B 359     21.933  41.498  76.055  1.00 21.84           C
ATOM   6082  CG   PHE B 359     23.125  41.106  76.930  1.00 24.11           C
ATOM   6083  CD1  PHE B 359     24.333  41.792  76.845  1.00 24.04           C
ATOM   6084  CD2  PHE B 359     23.053  39.989  77.757  1.00 24.73           C
ATOM   6085  CE1  PHE B 359     25.464  41.370  77.562  1.00 24.53           C
ATOM   6086  CE2  PHE B 359     24.171  39.547  78.484  1.00 24.96           C
ATOM   6087  CZ   PHE B 359     25.380  40.240  78.384  1.00 25.65           C
ATOM   6088  N    ASP B 360     21.315  38.806  74.768  1.00 19.90           N
ATOM   6089  CA   ASP B 360     21.415  37.348  74.787  1.00 25.21           C
ATOM   6090  C    ASP B 360     21.908  36.722  73.474  1.00 24.98           C
ATOM   6091  O    ASP B 360     22.768  35.813  73.472  1.00 25.31           O
ATOM   6092  CB   ASP B 360     20.068  36.746  75.159  1.00 24.69           C
ATOM   6093  CG   ASP B 360     20.165  35.258  75.420  1.00 28.46           C
ATOM   6094  OD1  ASP B 360     21.072  34.861  76.190  1.00 26.75           O
ATOM   6095  OD2  ASP B 360     19.334  34.506  74.863  1.00 28.06           O
ATOM   6096  N    LEU B 361     21.369  37.189  72.357  1.00 23.83           N
ATOM   6097  CA   LEU B 361     21.803  36.681  71.062  1.00 23.70           C
ATOM   6098  C    LEU B 361     23.241  37.089  70.774  1.00 23.87           C
ATOM   6099  O    LEU B 361     24.080  36.284  70.342  1.00 24.12           O
ATOM   6100  CB   LEU B 361     20.893  37.234  69.952  1.00 23.14           C
ATOM   6101  CG   LEU B 361     21.333  36.873  68.529  1.00 23.78           C
ATOM   6102  CD1  LEU B 361     21.335  35.321  68.345  1.00 20.10           C
ATOM   6103  CD2  LEU B 361     20.364  37.490  67.506  1.00 19.77           C
ATOM   6104  N    ALA B 362     23.534  38.358  71.004  1.00 21.92           N
ATOM   6105  CA   ALA B 362     24.858  38.852  70.728  1.00 23.42           C
ATOM   6106  C    ALA B 362     25.925  38.224  71.640  1.00 25.17           C
ATOM   6107  O    ALA B 362     27.041  37.962  71.185  1.00 26.60           O
ATOM   6108  CB   ALA B 362     24.873  40.365  70.843  1.00 22.18           C
ATOM   6109  N    TYR B 363     25.601  37.989  72.910  1.00 27.20           N
ATOM   6110  CA   TYR B 363     26.598  37.407  73.826  1.00 29.36           C
ATOM   6111  C    TYR B 363     26.956  36.007  73.303  1.00 29.44           C
ATOM   6112  O    TYR B 363     28.126  35.652  73.200  1.00 29.79           O
ATOM   6113  CB   TYR B 363     26.049  37.314  75.251  1.00 31.35           C
ATOM   6114  CG   TYR B 363     27.092  36.858  76.263  1.00 33.87           C
ATOM   6115  CD1  TYR B 363     28.063  37.741  76.744  1.00 35.44           C
ATOM   6116  CD2  TYR B 363     27.135  35.525  76.698  1.00 36.18           C
ATOM   6117  CE1  TYR B 363     29.059  37.307  77.638  1.00 36.70           C
ATOM   6118  CE2  TYR B 363     28.120  35.081  77.589  1.00 35.21           C
ATOM   6119  CZ   TYR B 363     29.075  35.970  78.053  1.00 37.67           C
ATOM   6120  OH   TYR B 363     30.049  35.538  78.947  1.00 38.53           O
ATOM   6121  N    GLY B 364     25.930  35.234  72.971  1.00 29.25           N
ATOM   6122  CA   GLY B 364     26.133  33.899  72.431  1.00 29.73           C
ATOM   6123  C    GLY B 364     26.899  33.984  71.133  1.00 29.29           C
ATOM   6124  O    GLY B 364     27.885  33.261  70.911  1.00 27.97           O
ATOM   6125  N    TYR B 365     26.470  34.891  70.262  1.00 27.78           N
ATOM   6126  CA   TYR B 365     27.141  35.042  68.984  1.00 26.99           C
ATOM   6127  C    TYR B 365     28.601  35.410  69.204  1.00 27.82           C
ATOM   6128  O    TYR B 365     29.466  34.986  68.439  1.00 29.47           O
ATOM   6129  CB   TYR B 365     26.424  36.106  68.147  1.00 25.66           C
ATOM   6130  CG   TYR B 365     26.988  36.370  66.760  1.00 24.66           C
ATOM   6131  CD1  TYR B 365     26.814  35.453  65.720  1.00 24.63           C
ATOM   6132  CD2  TYR B 365     27.563  37.610  66.453  1.00 24.19           C
ATOM   6133  CE1  TYR B 365     27.180  35.775  64.404  1.00 23.68           C
ATOM   6134  CE2  TYR B 365     27.930  37.939  65.150  1.00 25.53           C
ATOM   6135  CZ   TYR B 365     27.725  37.010  64.123  1.00 25.22           C
ATOM   6136  OH   TYR B 365     28.013  37.377  62.822  1.00 24.73           O
ATOM   6137  N    ALA B 366     28.908  36.174  70.254  1.00 28.20           N
ATOM   6138  CA   ALA B 366     30.311  36.533  70.462  1.00 30.17           C
ATOM   6139  C    ALA B 366     31.135  35.271  70.799  1.00 31.85           C
ATOM   6140  O    ALA B 366     32.302  35.164  70.447  1.00 32.42           O
ATOM   6141  CB   ALA B 366     30.457  37.590  71.598  1.00 30.48           C
ATOM   6142  N    GLN B 367     30.512  34.303  71.441  1.00 33.93           N
ATOM   6143  CA   GLN B 367     31.239  33.098  71.831  1.00 36.37           C
ATOM   6144  C    GLN B 367     31.256  31.936  70.823  1.00 36.86           C
ATOM   6145  O    GLN B 367     32.298  31.297  70.644  1.00 36.51           O
ATOM   6146  CB   GLN B 367     30.700  32.586  73.172  1.00 38.21           C
ATOM   6147  CG   GLN B 367     30.730  33.641  74.281  1.00 43.53           C
ATOM   6148  CD   GLN B 367     32.150  34.022  74.695  1.00 46.13           C
ATOM   6149  OE1  GLN B 367     32.841  33.246  75.376  1.00 49.68           O
ATOM   6150  NE2  GLN B 367     32.599  35.206  74.276  1.00 46.10           N
ATOM   6151  N    ASN B 368     30.116  31.683  70.179  1.00 35.37           N
ATOM   6152  CA   ASN B 368     29.946  30.575  69.239  1.00 35.07           C
ATOM   6153  C    ASN B 368     29.536  30.898  67.797  1.00 32.87           C
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| ATOM | 6154 | O   | ASN B 368 | 29.189 | 29.989 | 67.042 | 1.00 | 31.07 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 6155 | CB  | ASN B 368 | 28.871 | 29.653 | 69.780 | 1.00 | 38.45 | C |
| ATOM | 6156 | CG  | ASN B 368 | 29.247 | 29.034 | 71.071 | 1.00 | 43.47 | C |
| ATOM | 6157 | OD1 | ASN B 368 | 29.937 | 29.642 | 71.907 | 1.00 | 45.92 | O |
| ATOM | 6158 | ND2 | ASN B 368 | 28.786 | 27.811 | 71.271 | 1.00 | 44.77 | N |
| ATOM | 6159 | N   | GLN B 369 | 29.535 | 32.170 | 67.422 | 1.00 | 31.34 | N |
| ATOM | 6160 | CA  | GLN B 369 | 29.110 | 32.560 | 66.082 | 1.00 | 29.06 | C |
| ATOM | 6161 | C   | GLN B 369 | 27.774 | 31.933 | 65.657 | 1.00 | 28.54 | C |
| ATOM | 6162 | O   | GLN B 369 | 26.774 | 31.999 | 66.392 | 1.00 | 27.21 | O |
| ATOM | 6163 | CB  | GLN B 369 | 30.209 | 32.247 | 65.081 | 1.00 | 30.84 | C |
| ATOM | 6164 | CG  | GLN B 369 | 31.485 | 33.056 | 65.335 | 1.00 | 32.97 | C |
| ATOM | 6165 | CD  | GLN B 369 | 32.381 | 32.438 | 66.398 | 1.00 | 35.55 | C |
| ATOM | 6166 | OE1 | GLN B 369 | 32.578 | 32.990 | 67.494 | 1.00 | 36.64 | O |
| ATOM | 6167 | NE2 | GLN B 369 | 32.916 | 31.281 | 66.085 | 1.00 | 33.79 | N |
| ATOM | 6168 | N   | MET B 370 | 27.725 | 31.262 | 64.507 | 1.00 | 27.95 | N |
| ATOM | 6169 | CA  | MET B 370 | 26.431 | 30.726 | 64.088 | 1.00 | 25.71 | C |
| ATOM | 6170 | C   | MET B 370 | 25.657 | 29.819 | 65.025 | 1.00 | 27.64 | C |
| ATOM | 6171 | O   | MET B 370 | 24.414 | 29.828 | 64.988 | 1.00 | 26.47 | O |
| ATOM | 6172 | CB  | MET B 370 | 26.541 | 30.087 | 62.696 | 1.00 | 26.03 | C |
| ATOM | 6173 | CG  | MET B 370 | 27.120 | 31.036 | 61.623 | 1.00 | 24.71 | C |
| ATOM | 6174 | SD  | MET B 370 | 26.176 | 32.646 | 61.500 | 1.00 | 25.42 | S |
| ATOM | 6175 | CE  | MET B 370 | 24.544 | 31.931 | 61.635 | 1.00 | 20.57 | C |
| ATOM | 6176 | N   | SER B 371 | 26.326 | 29.036 | 65.886 | 1.00 | 27.04 | N |
| ATOM | 6177 | CA  | SER B 371 | 25.542 | 28.176 | 66.786 | 1.00 | 27.52 | C |
| ATOM | 6178 | C   | SER B 371 | 24.487 | 28.988 | 67.592 | 1.00 | 26.72 | C |
| ATOM | 6179 | O   | SER B 371 | 23.335 | 28.551 | 67.764 | 1.00 | 26.58 | O |
| ATOM | 6180 | CB  | SER B 371 | 26.468 | 27.422 | 67.761 | 1.00 | 27.62 | C |
| ATOM | 6181 | OG  | SER B 371 | 27.442 | 26.678 | 67.054 | 1.00 | 29.02 | O |
| ATOM | 6182 | N   | ALA B 372 | 24.875 | 30.165 | 68.083 | 1.00 | 27.64 | N |
| ATOM | 6183 | CA  | ALA B 372 | 23.936 | 30.979 | 68.873 | 1.00 | 27.39 | C |
| ATOM | 6184 | C   | ALA B 372 | 22.757 | 31.455 | 68.026 | 1.00 | 26.35 | C |
| ATOM | 6185 | O   | ALA B 372 | 21.616 | 31.448 | 68.484 | 1.00 | 25.92 | O |
| ATOM | 6186 | CB  | ALA B 372 | 24.651 | 32.170 | 69.507 | 1.00 | 26.70 | C |
| ATOM | 6187 | N   | TYR B 373 | 22.997 | 31.844 | 66.783 | 1.00 | 26.42 | N |
| ATOM | 6188 | CA  | TYR B 373 | 21.841 | 32.271 | 65.995 | 1.00 | 25.12 | C |
| ATOM | 6189 | C   | TYR B 373 | 20.952 | 31.112 | 65.640 | 1.00 | 25.70 | C |
| ATOM | 6190 | O   | TYR B 373 | 19.720 | 31.219 | 65.684 | 1.00 | 23.53 | O |
| ATOM | 6191 | CB  | TYR B 373 | 22.239 | 32.982 | 64.720 | 1.00 | 26.07 | C |
| ATOM | 6192 | CG  | TYR B 373 | 21.014 | 33.568 | 64.086 | 1.00 | 28.08 | C |
| ATOM | 6193 | CD1 | TYR B 373 | 20.417 | 34.722 | 64.617 | 1.00 | 27.51 | C |
| ATOM | 6194 | CD2 | TYR B 373 | 20.373 | 32.920 | 63.025 | 1.00 | 26.09 | C |
| ATOM | 6195 | CE1 | TYR B 373 | 19.214 | 35.195 | 64.101 | 1.00 | 28.35 | C |
| ATOM | 6196 | CE2 | TYR B 373 | 19.180 | 33.393 | 62.515 | 1.00 | 28.21 | C |
| ATOM | 6197 | CZ  | TYR B 373 | 18.606 | 34.520 | 63.052 | 1.00 | 27.99 | C |
| ATOM | 6198 | OH  | TYR B 373 | 17.409 | 34.956 | 62.551 | 1.00 | 28.05 | O |
| ATOM | 6199 | N   | VAL B 374 | 21.565 | 29.971 | 65.298 | 1.00 | 26.90 | N |
| ATOM | 6200 | CA  | VAL B 374 | 20.763 | 28.792 | 64.970 | 1.00 | 26.59 | C |
| ATOM | 6201 | C   | VAL B 374 | 19.824 | 28.427 | 66.123 | 1.00 | 25.23 | C |
| ATOM | 6202 | O   | VAL B 374 | 18.675 | 28.075 | 65.892 | 1.00 | 24.52 | O |
| ATOM | 6203 | CB  | VAL B 374 | 21.674 | 27.594 | 64.563 | 1.00 | 27.58 | C |
| ATOM | 6204 | CG1 | VAL B 374 | 20.818 | 26.291 | 64.371 | 1.00 | 27.64 | C |
| ATOM | 6205 | CG2 | VAL B 374 | 22.373 | 27.941 | 63.238 | 1.00 | 25.63 | C |
| ATOM | 6206 | N   | GLU B 375 | 20.291 | 28.536 | 67.367 | 1.00 | 26.23 | N |
| ATOM | 6207 | CA  | GLU B 375 | 19.440 | 28.249 | 68.532 | 1.00 | 27.21 | C |
| ATOM | 6208 | C   | GLU B 375 | 18.187 | 29.112 | 68.513 | 1.00 | 26.82 | C |
| ATOM | 6209 | O   | GLU B 375 | 17.101 | 28.711 | 68.946 | 1.00 | 27.87 | O |
| ATOM | 6210 | CB  | GLU B 375 | 20.158 | 28.572 | 69.846 | 1.00 | 31.38 | C |
| ATOM | 6211 | CG  | GLU B 375 | 21.224 | 27.614 | 70.295 | 1.00 | 36.54 | C |
| ATOM | 6212 | CD  | GLU B 375 | 21.966 | 28.159 | 71.523 | 1.00 | 40.71 | C |
| ATOM | 6213 | OE1 | GLU B 375 | 21.295 | 28.713 | 72.430 | 1.00 | 42.02 | O |
| ATOM | 6214 | OE2 | GLU B 375 | 23.217 | 28.034 | 71.582 | 1.00 | 43.98 | O |
| ATOM | 6215 | N   | LEU B 376 | 18.339 | 30.344 | 68.053 | 1.00 | 27.49 | N |
| ATOM | 6216 | CA  | LEU B 376 | 17.184 | 31.226 | 67.995 | 1.00 | 24.37 | C |
| ATOM | 6217 | C   | LEU B 376 | 16.244 | 30.798 | 66.867 | 1.00 | 23.95 | C |
| ATOM | 6218 | O   | LEU B 376 | 15.029 | 30.707 | 67.058 | 1.00 | 21.85 | O |
| ATOM | 6219 | CB  | LEU B 376 | 17.647 | 32.677 | 67.776 | 1.00 | 24.88 | C |
| ATOM | 6220 | CG  | LEU B 376 | 16.517 | 33.678 | 67.470 | 1.00 | 23.63 | C |
| ATOM | 6221 | CD1 | LEU B 376 | 15.416 | 33.580 | 68.535 | 1.00 | 20.20 | C |
| ATOM | 6222 | CD2 | LEU B 376 | 17.075 | 35.091 | 67.364 | 1.00 | 22.44 | C |
| ATOM | 6223 | N   | GLN B 377 | 16.810 | 30.542 | 65.689 | 1.00 | 24.36 | N |
| ATOM | 6224 | CA  | GLN B 377 | 15.996 | 30.136 | 64.555 | 1.00 | 25.61 | C |
| ATOM | 6225 | C   | GLN B 377 | 15.200 | 28.866 | 64.901 | 1.00 | 26.37 | C |
| ATOM | 6226 | O   | GLN B 377 | 14.030 | 28.720 | 64.522 | 1.00 | 23.59 | O |
| ATOM | 6227 | CB  | GLN B 377 | 16.870 | 29.911 | 63.305 | 1.00 | 25.88 | C |
| ATOM | 6228 | CG  | GLN B 377 | 16.069 | 29.567 | 62.027 | 1.00 | 26.81 | C |
| ATOM | 6229 | CD  | GLN B 377 | 16.911 | 29.603 | 60.740 | 1.00 | 28.50 | C |
| ATOM | 6230 | OE1 | GLN B 377 | 16.604 | 30.373 | 59.817 | 1.00 | 25.52 | O |
| ATOM | 6231 | NE2 | GLN B 377 | 17.969 | 28.761 | 60.665 | 1.00 | 24.98 | N |
| ATOM | 6232 | N   | GLU B 378 | 15.823 | 27.957 | 65.655 | 1.00 | 27.99 | N |
| ATOM | 6233 | CA  | GLU B 378 | 15.122 | 26.737 | 66.024 | 1.00 | 28.57 | C |

| ATOM | 6234 | C   | GLU B 378 | 14.012 | 27.068 | 66.990 | 1.00 27.70 | C |
| ATOM | 6235 | O   | GLU B 378 | 12.922 | 26.504 | 66.922 | 1.00 26.33 | O |
| ATOM | 6236 | CB  | GLU B 378 | 16.090 | 25.720 | 66.624 | 1.00 30.03 | C |
| ATOM | 6237 | CG  | GLU B 378 | 16.943 | 25.010 | 65.592 | 1.00 31.34 | C |
| ATOM | 6238 | CD  | GLU B 378 | 16.118 | 24.372 | 64.449 | 1.00 33.80 | C |
| ATOM | 6239 | OE1 | GLU B 378 | 15.093 | 23.674 | 64.709 | 1.00 35.40 | O |
| ATOM | 6240 | OE2 | GLU B 378 | 16.511 | 24.560 | 63.277 | 1.00 33.44 | O |
| ATOM | 6241 | N   | ARG B 379 | 14.279 | 28.011 | 67.892 | 1.00 29.13 | N |
| ATOM | 6242 | CA  | ARG B 379 | 13.246 | 28.404 | 68.837 | 1.00 28.05 | C |
| ATOM | 6243 | C   | ARG B 379 | 12.069 | 28.981 | 68.075 | 1.00 26.13 | C |
| ATOM | 6244 | O   | ARG B 379 | 10.918 | 28.775 | 68.460 | 1.00 23.97 | O |
| ATOM | 6245 | CB  | ARG B 379 | 13.775 | 29.439 | 69.826 | 1.00 30.64 | C |
| ATOM | 6246 | CG  | ARG B 379 | 14.711 | 28.860 | 70.875 | 1.00 33.64 | C |
| ATOM | 6247 | CD  | ARG B 379 | 14.567 | 29.593 | 72.210 | 1.00 36.19 | C |
| ATOM | 6248 | NE  | ARG B 379 | 15.007 | 30.983 | 72.149 | 1.00 39.06 | N |
| ATOM | 6249 | CZ  | ARG B 379 | 16.278 | 31.373 | 72.085 | 1.00 40.27 | C |
| ATOM | 6250 | NH1 | ARG B 379 | 17.266 | 30.472 | 72.072 | 1.00 42.57 | N |
| ATOM | 6251 | NH2 | ARG B 379 | 16.561 | 32.671 | 72.039 | 1.00 40.49 | N |
| ATOM | 6252 | N   | GLU B 380 | 12.365 | 29.752 | 67.020 | 1.00 25.61 | N |
| ATOM | 6253 | CA  | GLU B 380 | 11.308 | 30.332 | 66.199 | 1.00 25.51 | C |
| ATOM | 6254 | C   | GLU B 380 | 10.510 | 29.214 | 65.547 | 1.00 25.45 | C |
| ATOM | 6255 | O   | GLU B 380 | 9.280  | 29.216 | 65.558 | 1.00 23.57 | O |
| ATOM | 6256 | CB  | GLU B 380 | 11.901 | 31.216 | 65.109 | 1.00 25.77 | C |
| ATOM | 6257 | CG  | GLU B 380 | 12.492 | 32.506 | 65.651 | 1.00 27.26 | C |
| ATOM | 6258 | CD  | GLU B 380 | 12.921 | 33.434 | 64.560 | 1.00 27.33 | C |
| ATOM | 6259 | OE1 | GLU B 380 | 14.064 | 33.292 | 64.054 | 1.00 27.40 | O |
| ATOM | 6260 | OE2 | GLU B 380 | 12.098 | 34.301 | 64.207 | 1.00 28.57 | O |
| ATOM | 6261 | N   | PHE B 381 | 11.222 | 28.267 | 64.948 | 1.00 26.07 | N |
| ATOM | 6262 | CA  | PHE B 381 | 10.518 | 27.140 | 64.339 | 1.00 29.17 | C |
| ATOM | 6263 | C   | PHE B 381 | 9.600  | 26.456 | 65.348 | 1.00 28.81 | C |
| ATOM | 6264 | O   | PHE B 381 | 8.413  | 26.205 | 65.079 | 1.00 29.21 | O |
| ATOM | 6265 | CB  | PHE B 381 | 11.516 | 26.130 | 63.787 | 1.00 29.79 | C |
| ATOM | 6266 | CG  | PHE B 381 | 12.079 | 26.521 | 62.462 | 1.00 30.21 | C |
| ATOM | 6267 | CD1 | PHE B 381 | 11.233 | 26.957 | 61.443 | 1.00 29.09 | C |
| ATOM | 6268 | CD2 | PHE B 381 | 13.440 | 26.479 | 62.235 | 1.00 28.24 | C |
| ATOM | 6269 | CE1 | PHE B 381 | 11.749 | 27.350 | 60.219 | 1.00 30.33 | C |
| ATOM | 6270 | CE2 | PHE B 381 | 13.962 | 26.872 | 61.005 | 1.00 29.70 | C |
| ATOM | 6271 | CZ  | PHE B 381 | 13.115 | 27.308 | 60.004 | 1.00 28.81 | C |
| ATOM | 6272 | N   | ALA B 382 | 10.147 | 26.177 | 66.527 | 1.00 30.84 | N |
| ATOM | 6273 | CA  | ALA B 382 | 9.385  | 25.511 | 67.574 | 1.00 30.93 | C |
| ATOM | 6274 | C   | ALA B 382 | 8.162  | 26.323 | 67.989 | 1.00 32.04 | C |
| ATOM | 6275 | O   | ALA B 382 | 7.148  | 25.760 | 68.387 | 1.00 32.41 | O |
| ATOM | 6276 | CB  | ALA B 382 | 10.268 | 25.269 | 68.768 | 1.00 31.72 | C |
| ATOM | 6277 | N   | ALA B 383 | 8.253  | 27.650 | 67.892 | 1.00 31.45 | N |
| ATOM | 6278 | CA  | ALA B 383 | 7.149  | 28.499 | 68.301 | 1.00 29.80 | C |
| ATOM | 6279 | C   | ALA B 383 | 6.009  | 28.511 | 67.300 | 1.00 31.03 | C |
| ATOM | 6280 | O   | ALA B 383 | 4.928  | 29.029 | 67.591 | 1.00 28.05 | O |
| ATOM | 6281 | CB  | ALA B 383 | 7.650  | 29.926 | 68.532 | 1.00 28.82 | C |
| ATOM | 6282 | N   | GLU B 384 | 6.241  | 27.947 | 66.116 | 1.00 32.52 | N |
| ATOM | 6283 | CA  | GLU B 384 | 5.201  | 27.941 | 65.101 | 1.00 35.43 | C |
| ATOM | 6284 | C   | GLU B 384 | 3.948  | 27.216 | 65.585 | 1.00 36.23 | C |
| ATOM | 6285 | O   | GLU B 384 | 2.827  | 27.607 | 65.250 | 1.00 35.87 | O |
| ATOM | 6286 | CB  | GLU B 384 | 5.747  | 27.347 | 63.786 | 1.00 36.44 | C |
| ATOM | 6287 | CG  | GLU B 384 | 6.996  | 28.102 | 63.291 | 1.00 37.72 | C |
| ATOM | 6288 | CD  | GLU B 384 | 7.458  | 27.700 | 61.909 | 1.00 39.38 | C |
| ATOM | 6289 | OE1 | GLU B 384 | 7.328  | 26.521 | 61.555 | 1.00 40.12 | O |
| ATOM | 6290 | OE2 | GLU B 384 | 7.982  | 28.560 | 61.174 | 1.00 40.27 | O |
| ATOM | 6291 | N   | GLU B 385 | 4.131  | 26.183 | 66.406 | 1.00 38.25 | N |
| ATOM | 6292 | CA  | GLU B 385 | 2.978  | 25.459 | 66.914 | 1.00 40.19 | C |
| ATOM | 6293 | C   | GLU B 385 | 2.164  | 26.351 | 67.823 | 1.00 39.68 | C |
| ATOM | 6294 | O   | GLU B 385 | 0.975  | 26.108 | 68.033 | 1.00 40.14 | O |
| ATOM | 6295 | CB  | GLU B 385 | 3.396  | 24.167 | 67.635 | 1.00 43.18 | C |
| ATOM | 6296 | CG  | GLU B 385 | 4.695  | 24.219 | 68.417 | 1.00 47.03 | C |
| ATOM | 6297 | CD  | GLU B 385 | 5.387  | 22.849 | 68.476 | 1.00 49.89 | C |
| ATOM | 6298 | OE1 | GLU B 385 | 4.686  | 21.824 | 68.299 | 1.00 49.46 | O |
| ATOM | 6299 | OE2 | GLU B 385 | 6.623  | 22.799 | 68.705 | 1.00 50.35 | O |
| ATOM | 6300 | N   | ARG B 386 | 2.801  | 27.406 | 68.329 | 1.00 38.28 | N |
| ATOM | 6301 | CA  | ARG B 386 | 2.141  | 28.374 | 69.199 | 1.00 38.14 | C |
| ATOM | 6302 | C   | ARG B 386 | 1.447  | 29.521 | 68.435 | 1.00 36.27 | C |
| ATOM | 6303 | O   | ARG B 386 | 0.714  | 30.313 | 69.033 | 1.00 34.79 | O |
| ATOM | 6304 | CB  | ARG B 386 | 3.147  | 28.958 | 70.213 | 1.00 39.02 | C |
| ATOM | 6305 | CG  | ARG B 386 | 3.424  | 28.058 | 71.421 | 1.00 41.65 | C |
| ATOM | 6306 | CD  | ARG B 386 | 4.131  | 28.816 | 72.555 | 1.00 43.32 | C |
| ATOM | 6307 | NE  | ARG B 386 | 5.537  | 29.110 | 72.270 | 1.00 45.28 | N |
| ATOM | 6308 | CZ  | ARG B 386 | 6.161  | 30.215 | 72.678 | 1.00 45.24 | C |
| ATOM | 6309 | NH1 | ARG B 386 | 5.503  | 31.123 | 73.386 | 1.00 44.23 | N |
| ATOM | 6310 | NH2 | ARG B 386 | 7.435  | 30.416 | 72.371 | 1.00 46.04 | N |
| ATOM | 6311 | N   | GLY B 387 | 1.683  | 29.605 | 67.122 | 1.00 34.91 | N |
| ATOM | 6312 | CA  | GLY B 387 | 1.064  | 30.655 | 66.322 | 1.00 31.95 | C |
| ATOM | 6313 | C   | GLY B 387 | 2.055  | 31.645 | 65.713 | 1.00 29.74 | C |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 6314 | O | GLY | B | 387 | 1.670 | 32.463 | 64.881 | 1.00 | 29.13 | O |
| ATOM | 6315 | N | TYR | B | 388 | 3.329 | 31.558 | 66.108 | 1.00 | 28.74 | N |
| ATOM | 6316 | CA | TYR | B | 388 | 4.375 | 32.453 | 65.602 | 1.00 | 26.22 | C |
| ATOM | 6317 | C | TYR | B | 388 | 4.582 | 32.257 | 64.114 | 1.00 | 26.03 | C |
| ATOM | 6318 | O | TYR | B | 388 | 4.774 | 31.125 | 63.656 | 1.00 | 24.83 | O |
| ATOM | 6319 | CB | TYR | B | 388 | 5.697 | 32.166 | 66.291 | 1.00 | 25.58 | C |
| ATOM | 6320 | CG | TYR | B | 388 | 6.816 | 33.078 | 65.865 | 1.00 | 24.56 | C |
| ATOM | 6321 | CD1 | TYR | B | 388 | 6.799 | 34.448 | 66.194 | 1.00 | 26.28 | C |
| ATOM | 6322 | CD2 | TYR | B | 388 | 7.942 | 32.574 | 65.254 | 1.00 | 23.41 | C |
| ATOM | 6323 | CE1 | TYR | B | 388 | 7.900 | 35.272 | 65.941 | 1.00 | 23.33 | C |
| ATOM | 6324 | CE2 | TYR | B | 388 | 9.032 | 33.375 | 64.988 | 1.00 | 24.91 | C |
| ATOM | 6325 | CZ | TYR | B | 388 | 9.008 | 34.735 | 65.350 | 1.00 | 25.77 | C |
| ATOM | 6326 | OH | TYR | B | 388 | 10.151 | 35.476 | 65.177 | 1.00 | 23.55 | O |
| ATOM | 6327 | N | THR | B | 389 | 4.627 | 33.356 | 63.360 | 1.00 | 22.85 | N |
| ATOM | 6328 | CA | THR | B | 389 | 4.775 | 33.281 | 61.903 | 1.00 | 23.90 | C |
| ATOM | 6329 | C | THR | B | 389 | 5.995 | 33.978 | 61.293 | 1.00 | 21.98 | C |
| ATOM | 6330 | O | THR | B | 389 | 6.304 | 33.772 | 60.120 | 1.00 | 21.19 | O |
| ATOM | 6331 | CB | THR | B | 389 | 3.538 | 33.913 | 61.217 | 1.00 | 23.79 | C |
| ATOM | 6332 | OG1 | THR | B | 389 | 3.486 | 35.303 | 61.562 | 1.00 | 23.26 | O |
| ATOM | 6333 | CG2 | THR | B | 389 | 2.246 | 33.257 | 61.721 | 1.00 | 25.97 | C |
| ATOM | 6334 | N | ALA | B | 390 | 6.689 | 34.791 | 62.083 | 1.00 | 23.19 | N |
| ATOM | 6335 | CA | ALA | B | 390 | 7.830 | 35.557 | 61.562 | 1.00 | 21.28 | C |
| ATOM | 6336 | C | ALA | B | 390 | 9.092 | 34.791 | 61.155 | 1.00 | 23.04 | C |
| ATOM | 6337 | O | ALA | B | 390 | 10.013 | 35.382 | 60.611 | 1.00 | 21.55 | O |
| ATOM | 6338 | CB | ALA | B | 390 | 8.180 | 36.637 | 62.519 | 1.00 | 18.66 | C |
| ATOM | 6339 | N | THR | B | 391 | 9.167 | 33.478 | 61.381 | 1.00 | 21.12 | N |
| ATOM | 6340 | CA | THR | B | 391 | 10.371 | 32.797 | 60.931 | 1.00 | 21.86 | C |
| ATOM | 6341 | C | THR | B | 391 | 10.445 | 32.920 | 59.395 | 1.00 | 21.37 | C |
| ATOM | 6342 | O | THR | B | 391 | 11.550 | 32.951 | 58.820 | 1.00 | 20.38 | O |
| ATOM | 6343 | CB | THR | B | 391 | 10.392 | 31.277 | 61.318 | 1.00 | 23.07 | C |
| ATOM | 6344 | OG1 | THR | B | 391 | 10.000 | 31.127 | 62.692 | 1.00 | 23.17 | O |
| ATOM | 6345 | CG2 | THR | B | 391 | 11.823 | 30.729 | 61.127 | 1.00 | 23.21 | C |
| ATOM | 6346 | N | LYS | B | 392 | 9.274 | 32.965 | 58.739 | 1.00 | 20.55 | N |
| ATOM | 6347 | CA | LYS | B | 392 | 9.207 | 33.154 | 57.286 | 1.00 | 19.60 | C |
| ATOM | 6348 | C | LYS | B | 392 | 9.056 | 34.674 | 57.191 | 1.00 | 20.37 | C |
| ATOM | 6349 | O | LYS | B | 392 | 7.965 | 35.219 | 57.054 | 1.00 | 16.93 | O |
| ATOM | 6350 | CB | LYS | B | 392 | 7.991 | 32.471 | 56.680 | 1.00 | 22.47 | C |
| ATOM | 6351 | CG | LYS | B | 392 | 8.087 | 30.943 | 56.721 | 1.00 | 24.26 | C |
| ATOM | 6352 | CD | LYS | B | 392 | 7.466 | 30.314 | 55.511 | 1.00 | 28.50 | C |
| ATOM | 6353 | CE | LYS | B | 392 | 5.962 | 30.443 | 55.498 | 1.00 | 31.88 | C |
| ATOM | 6354 | NZ | LYS | B | 392 | 5.453 | 30.010 | 54.147 | 1.00 | 35.56 | N |
| ATOM | 6355 | N | HIS | B | 393 | 10.191 | 35.331 | 57.282 | 1.00 | 19.11 | N |
| ATOM | 6356 | CA | HIS | B | 393 | 10.190 | 36.764 | 57.298 | 1.00 | 19.44 | C |
| ATOM | 6357 | C | HIS | B | 393 | 9.731 | 37.509 | 56.025 | 1.00 | 20.24 | C |
| ATOM | 6358 | O | HIS | B | 393 | 9.197 | 38.613 | 56.169 | 1.00 | 16.71 | O |
| ATOM | 6359 | CB | HIS | B | 393 | 11.567 | 37.246 | 57.703 | 1.00 | 19.12 | C |
| ATOM | 6360 | CG | HIS | B | 393 | 12.672 | 36.666 | 56.889 | 1.00 | 22.27 | C |
| ATOM | 6361 | ND1 | HIS | B | 393 | 13.618 | 35.822 | 57.431 | 1.00 | 22.14 | N |
| ATOM | 6362 | CD2 | HIS | B | 393 | 13.023 | 36.853 | 55.591 | 1.00 | 20.49 | C |
| ATOM | 6363 | CE1 | HIS | B | 393 | 14.516 | 35.526 | 56.504 | 1.00 | 23.72 | C |
| ATOM | 6364 | NE2 | HIS | B | 393 | 14.180 | 36.142 | 55.381 | 1.00 | 22.69 | N |
| ATOM | 6365 | N | GLN | B | 394 | 9.934 | 36.942 | 54.817 | 1.00 | 18.43 | N |
| ATOM | 6366 | CA | GLN | B | 394 | 9.556 | 37.663 | 53.577 | 1.00 | 17.98 | C |
| ATOM | 6367 | C | GLN | B | 394 | 8.048 | 37.897 | 53.575 | 1.00 | 17.81 | C |
| ATOM | 6368 | O | GLN | B | 394 | 7.564 | 39.028 | 53.429 | 1.00 | 17.80 | O |
| ATOM | 6369 | CB | GLN | B | 394 | 9.962 | 36.858 | 52.330 | 1.00 | 16.82 | C |
| ATOM | 6370 | CG | GLN | B | 394 | 11.439 | 36.340 | 52.312 | 1.00 | 17.37 | C |
| ATOM | 6371 | CD | GLN | B | 394 | 12.488 | 37.454 | 52.254 | 1.00 | 16.79 | C |
| ATOM | 6372 | OE1 | GLN | B | 394 | 12.184 | 38.616 | 52.498 | 1.00 | 16.15 | O |
| ATOM | 6373 | NE2 | GLN | B | 394 | 13.741 | 37.090 | 51.959 | 1.00 | 17.04 | N |
| ATOM | 6374 | N | ARG | B | 395 | 7.280 | 36.826 | 53.767 | 1.00 | 18.60 | N |
| ATOM | 6375 | CA | ARG | B | 395 | 5.843 | 37.009 | 53.796 | 1.00 | 18.21 | C |
| ATOM | 6376 | C | ARG | B | 395 | 5.398 | 37.852 | 54.980 | 1.00 | 16.19 | C |
| ATOM | 6377 | O | ARG | B | 395 | 4.367 | 38.540 | 54.893 | 1.00 | 15.41 | O |
| ATOM | 6378 | CB | ARG | B | 395 | 5.091 | 35.659 | 53.855 | 1.00 | 18.92 | C |
| ATOM | 6379 | CG | ARG | B | 395 | 5.572 | 34.718 | 54.975 | 1.00 | 20.51 | C |
| ATOM | 6380 | CD | ARG | B | 395 | 4.428 | 33.871 | 55.514 | 1.00 | 21.87 | C |
| ATOM | 6381 | NE | ARG | B | 395 | 3.374 | 34.689 | 56.110 | 1.00 | 22.29 | N |
| ATOM | 6382 | CZ | ARG | B | 395 | 3.495 | 35.364 | 57.255 | 1.00 | 21.73 | C |
| ATOM | 6383 | NH1 | ARG | B | 395 | 4.633 | 35.328 | 57.951 | 1.00 | 18.88 | N |
| ATOM | 6384 | NH2 | ARG | B | 395 | 2.474 | 36.078 | 57.703 | 1.00 | 20.15 | N |
| ATOM | 6385 | N | GLU | B | 396 | 6.156 | 37.799 | 56.070 | 1.00 | 15.11 | N |
| ATOM | 6386 | CA | GLU | B | 396 | 5.794 | 38.512 | 57.293 | 1.00 | 16.56 | C |
| ATOM | 6387 | C | GLU | B | 396 | 5.787 | 40.006 | 57.045 | 1.00 | 16.87 | C |
| ATOM | 6388 | O | GLU | B | 396 | 4.971 | 40.719 | 57.621 | 1.00 | 17.86 | O |
| ATOM | 6389 | CB | GLU | B | 396 | 6.781 | 38.196 | 58.439 | 1.00 | 17.29 | C |
| ATOM | 6390 | CG | GLU | B | 396 | 6.432 | 38.800 | 59.832 | 1.00 | 17.45 | C |
| ATOM | 6391 | CD | GLU | B | 396 | 5.300 | 38.085 | 60.592 | 1.00 | 21.92 | C |
| ATOM | 6392 | OE1 | GLU | B | 396 | 4.938 | 36.947 | 60.214 | 1.00 | 20.10 | O |
| ATOM | 6393 | OE2 | GLU | B | 396 | 4.792 | 38.651 | 61.604 | 1.00 | 21.80 | O |

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ATOM   6394  N    VAL B 397      6.719  40.472  56.222  1.00 17.93           N
ATOM   6395  CA   VAL B 397      6.800  41.905  55.943  1.00 18.58           C
ATOM   6396  C    VAL B 397      6.046  42.317  54.673  1.00 18.44           C
ATOM   6397  O    VAL B 397      6.116  43.482  54.237  1.00 17.14           O
ATOM   6398  CB   VAL B 397      8.289  42.349  55.968  1.00 20.08           C
ATOM   6399  CG1  VAL B 397      9.103  41.715  54.846  1.00 20.80           C
ATOM   6400  CG2  VAL B 397      8.368  43.817  55.895  1.00 27.17           C
ATOM   6401  N    GLY B 398      5.320  41.356  54.073  1.00 16.43           N
ATOM   6402  CA   GLY B 398      4.505  41.673  52.904  1.00 15.64           C
ATOM   6403  C    GLY B 398      4.985  41.297  51.511  1.00 15.35           C
ATOM   6404  O    GLY B 398      4.424  41.789  50.551  1.00 17.03           O
ATOM   6405  N    ALA B 399      6.025  40.456  51.395  1.00 17.25           N
ATOM   6406  CA   ALA B 399      6.540  40.058  50.066  1.00 16.02           C
ATOM   6407  C    ALA B 399      5.408  39.472  49.224  1.00 16.53           C
ATOM   6408  O    ALA B 399      5.320  39.714  48.014  1.00 15.89           O
ATOM   6409  CB   ALA B 399      7.670  39.031  50.210  1.00 19.22           C
ATOM   6410  N    GLY B 400      4.523  38.713  49.867  1.00 17.25           N
ATOM   6411  CA   GLY B 400      3.427  38.143  49.118  1.00 16.66           C
ATOM   6412  C    GLY B 400      2.356  39.154  48.782  1.00 15.48           C
ATOM   6413  O    GLY B 400      1.680  39.047  47.771  1.00 16.86           O
ATOM   6414  N    TYR B 401      2.180  40.156  49.635  1.00 15.99           N
ATOM   6415  CA   TYR B 401      1.180  41.168  49.370  1.00 16.43           C
ATOM   6416  C    TYR B 401      1.658  42.087  48.223  1.00 16.86           C
ATOM   6417  O    TYR B 401      0.876  42.483  47.332  1.00 16.26           O
ATOM   6418  CB   TYR B 401      0.929  41.968  50.652  1.00 15.68           C
ATOM   6419  CG   TYR B 401     -0.047  43.092  50.482  1.00 15.87           C
ATOM   6420  CD1  TYR B 401     -1.424  42.864  50.418  1.00 13.11           C
ATOM   6421  CD2  TYR B 401      0.408  44.404  50.365  1.00 16.97           C
ATOM   6422  CE1  TYR B 401     -2.312  43.914  50.225  1.00 13.52           C
ATOM   6423  CE2  TYR B 401     -0.458  45.463  50.195  1.00 14.76           C
ATOM   6424  CZ   TYR B 401     -1.816  45.230  50.117  1.00 17.90           C
ATOM   6425  OH   TYR B 401     -2.655  46.305  49.925  1.00 16.05           O
ATOM   6426  N    PHE B 402      2.940  42.439  48.225  1.00 14.85           N
ATOM   6427  CA   PHE B 402      3.379  43.260  47.131  1.00 15.63           C
ATOM   6428  C    PHE B 402      3.419  42.446  45.831  1.00 16.51           C
ATOM   6429  O    PHE B 402      3.214  42.998  44.745  1.00 14.57           O
ATOM   6430  CB   PHE B 402      4.699  43.938  47.471  1.00 16.16           C
ATOM   6431  CG   PHE B 402      4.505  45.180  48.303  1.00 14.89           C
ATOM   6432  CD1  PHE B 402      4.396  45.104  49.681  1.00 14.64           C
ATOM   6433  CD2  PHE B 402      4.336  46.418  47.677  1.00 14.61           C
ATOM   6434  CE1  PHE B 402      4.115  46.258  50.462  1.00 14.25           C
ATOM   6435  CE2  PHE B 402      4.047  47.577  48.446  1.00 11.70           C
ATOM   6436  CZ   PHE B 402      3.935  47.486  49.845  1.00 11.94           C
ATOM   6437  N    ASP B 403      3.644  41.132  45.927  1.00 17.42           N
ATOM   6438  CA   ASP B 403      3.635  40.420  44.708  1.00 17.38           C
ATOM   6439  C    ASP B 403      2.238  40.420  44.122  1.00 17.28           C
ATOM   6440  O    ASP B 403      2.056  40.487  42.907  1.00 15.15           O
ATOM   6441  CB   ASP B 403      3.954  38.837  44.995  1.00 16.71           C
ATOM   6442  CG   ASP B 403      5.427  38.539  44.956  1.00 19.27           C
ATOM   6443  OD1  ASP B 403      6.211  39.462  44.637  1.00 19.44           O
ATOM   6444  OD2  ASP B 403      5.817  37.378  45.237  1.00 19.87           O
ATOM   6445  N    ARG B 404      1.235  40.425  44.993  1.00 16.97           N
ATOM   6446  CA   ARG B 404     -0.149  40.511  44.535  1.00 18.57           C
ATOM   6447  C    ARG B 404     -0.361  41.862  43.859  1.00 18.11           C
ATOM   6448  O    ARG B 404     -1.035  41.976  42.831  1.00 18.07           O
ATOM   6449  CB   ARG B 404     -1.119  40.334  45.712  1.00 21.34           C
ATOM   6450  CG   ARG B 404     -2.555  40.206  45.284  1.00 26.35           C
ATOM   6451  CD   ARG B 404     -2.801  38.916  44.488  1.00 32.23           C
ATOM   6452  NE   ARG B 404     -4.244  38.655  44.320  1.00 37.63           N
ATOM   6453  CZ   ARG B 404     -5.007  37.997  45.200  1.00 38.89           C
ATOM   6454  NH1  ARG B 404     -4.487  37.509  46.315  1.00 39.76           N
ATOM   6455  NH2  ARG B 404     -6.297  37.837  44.971  1.00 40.57           N
ATOM   6456  N    ILE B 405      0.204  42.913  44.425  1.00 15.44           N
ATOM   6457  CA   ILE B 405      0.038  44.206  43.754  1.00 15.14           C
ATOM   6458  C    ILE B 405      0.716  44.148  42.396  1.00 14.16           C
ATOM   6459  O    ILE B 405      0.128  44.542  41.374  1.00 16.70           O
ATOM   6460  CB   ILE B 405      0.672  45.398  44.586  1.00 14.80           C
ATOM   6461  CG1  ILE B 405     -0.160  45.670  45.835  1.00 13.45           C
ATOM   6462  CG2  ILE B 405      0.717  46.682  43.722  1.00 14.04           C
ATOM   6463  CD1  ILE B 405      0.594  46.460  46.939  1.00 16.55           C
ATOM   6464  N    ALA B 406      1.947  43.641  42.361  1.00 13.34           N
ATOM   6465  CA   ALA B 406      2.668  43.563  41.106  1.00 13.94           C
ATOM   6466  C    ALA B 406      1.904  42.810  40.009  1.00 15.33           C
ATOM   6467  O    ALA B 406      1.843  43.241  38.866  1.00 15.51           O
ATOM   6468  CB   ALA B 406      3.991  42.901  41.323  1.00 14.15           C
ATOM   6469  N    THR B 407      1.344  41.665  40.356  1.00 16.79           N
ATOM   6470  CA   THR B 407      0.627  40.887  39.333  1.00 16.71           C
ATOM   6471  C    THR B 407     -0.742  41.424  39.001  1.00 17.78           C
ATOM   6472  O    THR B 407     -1.313  41.060  37.971  1.00 19.92           O
ATOM   6473  CB   THR B 407      0.526  39.394  39.733  1.00 16.85           C
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ATOM   6474  OG1 THR B 407      -0.131  39.264  40.987  1.00 19.75           O
ATOM   6475  CG2 THR B 407       1.905  38.802  39.865  1.00 18.23           C
ATOM   6476  N   THR B 408      -1.262  42.317  39.830  1.00 17.72           N
ATOM   6477  CA  THR B 408      -2.540  42.910  39.539  1.00 18.02           C
ATOM   6478  C   THR B 408      -2.251  43.958  38.469  1.00 19.46           C
ATOM   6479  O   THR B 408      -3.023  44.150  37.519  1.00 17.70           O
ATOM   6480  CB  THR B 408      -3.156  43.592  40.782  1.00 19.32           C
ATOM   6481  OG1 THR B 408      -3.513  42.596  41.748  1.00 21.12           O
ATOM   6482  CG2 THR B 408      -4.366  44.382  40.403  1.00 18.48           C
ATOM   6483  N   VAL B 409      -1.119  44.635  38.619  1.00 18.58           N
ATOM   6484  CA  VAL B 409      -0.753  45.638  37.639  1.00 19.58           C
ATOM   6485  C   VAL B 409      -0.308  44.984  36.357  1.00 18.13           C
ATOM   6486  O   VAL B 409      -0.733  45.385  35.298  1.00 19.51           O
ATOM   6487  CB  VAL B 409       0.385  46.552  38.148  1.00 19.16           C
ATOM   6488  CG1 VAL B 409       0.843  47.443  37.032  1.00 20.17           C
ATOM   6489  CG2 VAL B 409      -0.126  47.377  39.356  1.00 17.94           C
ATOM   6490  N   ASP B 410       0.532  43.958  36.463  1.00 20.42           N
ATOM   6491  CA  ASP B 410       1.056  43.240  35.302  1.00 20.09           C
ATOM   6492  C   ASP B 410       1.136  41.730  35.593  1.00 21.60           C
ATOM   6493  O   ASP B 410       2.144  41.236  36.092  1.00 18.41           O
ATOM   6494  CB  ASP B 410       2.463  43.737  34.965  1.00 20.65           C
ATOM   6495  CG  ASP B 410       3.068  42.997  33.782  1.00 23.26           C
ATOM   6496  OD1 ASP B 410       2.325  42.232  33.096  1.00 21.85           O
ATOM   6497  OD2 ASP B 410       4.279  43.183  33.527  1.00 22.37           O
ATOM   6498  N   PRO B 411       0.077  40.980  35.264  1.00 23.47           N
ATOM   6499  CA  PRO B 411       0.124  39.533  35.530  1.00 24.62           C
ATOM   6500  C   PRO B 411       1.365  38.790  34.988  1.00 24.69           C
ATOM   6501  O   PRO B 411       1.750  37.735  35.518  1.00 24.58           O
ATOM   6502  CB  PRO B 411      -1.197  39.019  34.919  1.00 25.66           C
ATOM   6503  CG  PRO B 411      -1.591  40.058  33.943  1.00 29.05           C
ATOM   6504  CD  PRO B 411      -1.173  41.362  34.589  1.00 24.64           C
ATOM   6505  N   ASN B 412       1.988  39.337  33.949  1.00 22.22           N
ATOM   6506  CA  ASN B 412       3.154  38.694  33.341  1.00 25.67           C
ATOM   6507  C   ASN B 412       4.475  39.168  33.871  1.00 24.55           C
ATOM   6508  O   ASN B 412       5.523  38.871  33.273  1.00 24.84           O
ATOM   6509  CB  ASN B 412       3.173  38.920  31.829  1.00 27.69           C
ATOM   6510  CG  ASN B 412       1.927  38.419  31.165  1.00 30.77           C
ATOM   6511  OD1 ASN B 412       1.485  37.289  31.411  1.00 31.71           O
ATOM   6512  ND2 ASN B 412       1.337  39.255  30.314  1.00 33.59           N
ATOM   6513  N   SER B 413       4.460  39.914  34.964  1.00 22.19           N
ATOM   6514  CA  SER B 413       5.727  40.413  35.485  1.00 20.91           C
ATOM   6515  C   SER B 413       6.687  39.269  35.732  1.00 21.44           C
ATOM   6516  O   SER B 413       6.291  38.248  36.334  1.00 20.43           O
ATOM   6517  CB  SER B 413       5.542  41.166  36.805  1.00 21.01           C
ATOM   6518  OG  SER B 413       6.828  41.319  37.420  1.00 23.02           O
ATOM   6519  N   SER B 414       7.938  39.445  35.289  1.00 21.28           N
ATOM   6520  CA  SER B 414       8.996  38.455  35.491  1.00 23.04           C
ATOM   6521  C   SER B 414       9.864  38.840  36.690  1.00 22.50           C
ATOM   6522  O   SER B 414      10.902  38.244  36.935  1.00 21.51           O
ATOM   6523  CB  SER B 414       9.880  38.327  34.239  1.00 26.05           C
ATOM   6524  OG  SER B 414      10.588  39.511  33.984  1.00 27.84           O
ATOM   6525  N   THR B 415       9.420  39.818  37.468  1.00 20.78           N
ATOM   6526  CA  THR B 415      10.213  40.264  38.603  1.00 20.96           C
ATOM   6527  C   THR B 415       9.489  40.212  39.930  1.00 21.53           C
ATOM   6528  O   THR B 415       9.708  41.087  40.775  1.00 20.75           O
ATOM   6529  CB  THR B 415      10.719  41.706  38.397  1.00 22.85           C
ATOM   6530  OG1 THR B 415       9.595  42.591  38.237  1.00 24.17           O
ATOM   6531  CG2 THR B 415      11.592  41.789  37.175  1.00 22.73           C
ATOM   6532  N   THR B 416       8.624  39.206  40.125  1.00 19.23           N
ATOM   6533  CA  THR B 416       7.941  39.086  41.409  1.00 18.56           C
ATOM   6534  C   THR B 416       8.925  38.459  42.358  1.00 18.90           C
ATOM   6535  O   THR B 416       9.963  37.954  41.907  1.00 18.66           O
ATOM   6536  CB  THR B 416       6.622  38.309  41.318  1.00 20.55           C
ATOM   6537  OG1 THR B 416       6.830  36.992  40.794  1.00 22.17           O
ATOM   6538  CG2 THR B 416       5.689  39.070  40.454  1.00 18.70           C
ATOM   6539  N   ALA B 417       8.623  38.506  43.657  1.00 17.55           N
ATOM   6540  CA  ALA B 417       9.558  38.077  44.693  1.00 19.19           C
ATOM   6541  C   ALA B 417       9.547  36.691  45.324  1.00 19.88           C
ATOM   6542  O   ALA B 417      10.609  36.100  45.551  1.00 22.54           O
ATOM   6543  CB  ALA B 417       9.515  39.108  45.868  1.00 17.39           C
ATOM   6544  N   LEU B 418       8.369  36.198  45.674  1.00 20.64           N
ATOM   6545  CA  LEU B 418       8.367  34.924  46.376  1.00 21.79           C
ATOM   6546  C   LEU B 418       8.718  33.712  45.529  1.00 22.68           C
ATOM   6547  O   LEU B 418       9.335  32.753  46.035  1.00 23.54           O
ATOM   6548  CB  LEU B 418       7.036  34.719  47.106  1.00 21.68           C
ATOM   6549  CG  LEU B 418       6.755  35.553  48.371  1.00 20.48           C
ATOM   6550  CD1 LEU B 418       5.420  35.049  48.970  1.00 21.15           C
ATOM   6551  CD2 LEU B 418       7.892  35.415  49.429  1.00 20.77           C
ATOM   6552  N   THR B 419       8.384  33.751  44.246  1.00 23.14           N
ATOM   6553  CA  THR B 419       8.693  32.607  43.383  1.00 24.50           C
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ATOM   6554  C   THR B 419      10.204  32.479  43.186  1.00 24.94           C
ATOM   6555  O   THR B 419      10.871  33.403  42.734  1.00 24.11           O
ATOM   6556  CB  THR B 419       7.952  32.737  42.036  1.00 25.26           C
ATOM   6557  OG1 THR B 419       6.543  32.844  42.292  1.00 22.41           O
ATOM   6558  CG2 THR B 419       8.232  31.553  41.127  1.00 25.00           C
ATOM   6559  N   GLY B 420      10.746  31.322  43.553  1.00 25.90           N
ATOM   6560  CA  GLY B 420      12.180  31.125  43.413  1.00 25.39           C
ATOM   6561  C   GLY B 420      12.959  31.606  44.620  1.00 25.87           C
ATOM   6562  O   GLY B 420      14.190  31.596  44.611  1.00 27.02           O
ATOM   6563  N   SER B 421      12.268  32.016  45.673  1.00 25.40           N
ATOM   6564  CA  SER B 421      12.981  32.511  46.863  1.00 24.58           C
ATOM   6565  C   SER B 421      13.411  31.368  47.770  1.00 25.38           C
ATOM   6566  O   SER B 421      12.820  30.296  47.731  1.00 22.78           O
ATOM   6567  CB  SER B 421      12.086  33.436  47.657  1.00 24.90           C
ATOM   6568  OG  SER B 421      10.926  32.751  48.075  1.00 22.94           O
ATOM   6569  N   THR B 422      14.432  31.603  48.586  1.00 26.07           N
ATOM   6570  CA  THR B 422      14.866  30.562  49.503  1.00 27.75           C
ATOM   6571  C   THR B 422      13.769  30.324  50.523  1.00 28.84           C
ATOM   6572  O   THR B 422      13.724  29.242  51.157  1.00 28.77           O
ATOM   6573  CB  THR B 422      16.123  30.934  50.251  1.00 27.02           C
ATOM   6574  OG1 THR B 422      15.892  32.123  51.027  1.00 30.71           O
ATOM   6575  CG2 THR B 422      17.229  31.146  49.306  1.00 28.22           C
ATOM   6576  N   GLU B 423      12.881  31.310  50.709  1.00 26.94           N
ATOM   6577  CA  GLU B 423      11.801  31.106  51.669  1.00 26.31           C
ATOM   6578  C   GLU B 423      10.882  30.023  51.167  1.00 28.27           C
ATOM   6579  O   GLU B 423      10.456  29.140  51.932  1.00 27.12           O
ATOM   6580  CB  GLU B 423      10.967  32.374  51.929  1.00 23.49           C
ATOM   6581  CG  GLU B 423       9.845  32.148  52.968  1.00 23.10           C
ATOM   6582  CD  GLU B 423       9.330  33.466  53.574  1.00 23.64           C
ATOM   6583  OE1 GLU B 423      10.059  34.058  54.410  1.00 21.51           O
ATOM   6584  OE2 GLU B 423       8.218  33.907  53.192  1.00 21.09           O
ATOM   6585  N   GLU B 424      10.554  30.098  49.881  1.00 28.89           N
ATOM   6586  CA  GLU B 424       9.676  29.112  49.286  1.00 31.61           C
ATOM   6587  C   GLU B 424      10.386  27.758  49.206  1.00 31.61           C
ATOM   6588  O   GLU B 424       9.756  26.718  49.335  1.00 31.23           O
ATOM   6589  CB  GLU B 424       9.228  29.593  47.895  1.00 33.24           C
ATOM   6590  CG  GLU B 424       8.722  28.483  46.964  1.00 37.14           C
ATOM   6591  CD  GLU B 424       8.427  28.966  45.547  1.00 37.99           C
ATOM   6592  OE1 GLU B 424       7.324  29.502  45.306  1.00 40.33           O
ATOM   6593  OE2 GLU B 424       9.302  28.817  44.676  1.00 36.90           O
ATOM   6594  N   GLY B 425      11.709  27.780  49.039  1.00 31.51           N
ATOM   6595  CA  GLY B 425      12.451  26.546  48.903  1.00 31.74           C
ATOM   6596  C   GLY B 425      13.075  25.905  50.127  1.00 32.48           C
ATOM   6597  O   GLY B 425      13.495  24.753  50.046  1.00 31.31           O
ATOM   6598  N   GLN B 426      13.116  26.609  51.261  1.00 31.38           N
ATOM   6599  CA  GLN B 426      13.743  26.066  52.468  1.00 31.33           C
ATOM   6600  C   GLN B 426      12.908  26.098  53.766  1.00 31.74           C
ATOM   6601  O   GLN B 426      13.289  25.523  54.793  1.00 31.54           O
ATOM   6602  CB  GLN B 426      15.067  26.793  52.705  1.00 29.45           C
ATOM   6603  CG  GLN B 426      15.970  26.823  51.505  1.00 29.51           C
ATOM   6604  CD  GLN B 426      17.320  27.412  51.847  1.00 30.12           C
ATOM   6605  OE1 GLN B 426      17.657  27.521  53.027  1.00 29.85           O
ATOM   6606  NE2 GLN B 426      18.114  27.770  50.827  1.00 29.76           N
ATOM   6607  N   PHE B 427      11.765  26.760  53.727  1.00 30.76           N
ATOM   6608  CA  PHE B 427      10.927  26.838  54.897  1.00 31.29           C
ATOM   6609  C   PHE B 427       9.664  26.078  54.576  1.00 33.62           C
ATOM   6610  O   PHE B 427       9.246  25.272  55.425  1.00 35.19           O
ATOM   6611  CB  PHE B 427      10.622  28.320  55.266  1.00 28.52           C
ATOM   6612  CG  PHE B 427      11.823  29.063  55.754  1.00 24.39           C
ATOM   6613  CD1 PHE B 427      12.948  29.170  54.950  1.00 21.97           C
ATOM   6614  CD2 PHE B 427      11.880  29.556  57.050  1.00 21.96           C
ATOM   6615  CE1 PHE B 427      14.124  29.745  55.422  1.00 22.56           C
ATOM   6616  CE2 PHE B 427      13.064  30.144  57.543  1.00 21.59           C
ATOM   6617  CZ  PHE B 427      14.187  30.232  56.722  1.00 21.73           C
TER    6618      PHE B 427
ATOM   6619  N   ALA C   1     -13.878  44.048  67.077  1.00 50.62           N
ATOM   6620  CA  ALA C   1     -14.387  44.288  65.693  1.00 50.86           C
ATOM   6621  C   ALA C   1     -15.416  45.420  65.677  1.00 50.47           C
ATOM   6622  O   ALA C   1     -16.088  45.654  66.683  1.00 51.29           O
ATOM   6623  CB  ALA C   1     -15.008  43.018  65.149  1.00 50.64           C
ATOM   6624  N   SER C   2     -15.541  46.094  64.528  1.00 48.80           N
ATOM   6625  CA  SER C   2     -16.464  47.227  64.334  1.00 47.44           C
ATOM   6626  C   SER C   2     -16.917  47.285  62.863  1.00 45.74           C
ATOM   6627  O   SER C   2     -16.390  46.555  62.024  1.00 46.76           O
ATOM   6628  CB  SER C   2     -15.737  48.539  64.697  1.00 47.19           C
ATOM   6629  OG  SER C   2     -16.546  49.678  64.479  1.00 46.70           O
ATOM   6630  N   VAL C   3     -17.889  48.132  62.535  1.00 43.15           N
ATOM   6631  CA  VAL C   3     -18.313  48.226  61.137  1.00 40.66           C
ATOM   6632  C   VAL C   3     -17.528  49.334  60.445  1.00 39.06           C
ATOM   6633  O   VAL C   3     -17.465  49.380  59.215  1.00 38.13           O
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| ATOM | 6634 | CB  | VAL C | 3  | -19.831 | 48.592 | 60.964 | 1.00 40.72 | C |
| ATOM | 6635 | CG1 | VAL C | 3  | -20.694 | 47.658 | 61.759 | 1.00 39.97 | C |
| ATOM | 6636 | CG2 | VAL C | 3  | -20.087 | 50.045 | 61.355 | 1.00 40.54 | C |
| ATOM | 6637 | N   | VAL C | 4  | -16.930 | 50.220 | 61.248 | 1.00 36.21 | N |
| ATOM | 6638 | CA  | VAL C | 4  | -16.198 | 51.375 | 60.718 | 1.00 33.84 | C |
| ATOM | 6639 | C   | VAL C | 4  | -15.120 | 50.979 | 59.720 | 1.00 31.65 | C |
| ATOM | 6640 | O   | VAL C | 4  | -14.263 | 50.156 | 60.017 | 1.00 30.84 | O |
| ATOM | 6641 | CB  | VAL C | 4  | -15.549 | 52.197 | 61.847 | 1.00 33.10 | C |
| ATOM | 6642 | CG1 | VAL C | 4  | -15.045 | 53.526 | 61.293 | 1.00 31.66 | C |
| ATOM | 6643 | CG2 | VAL C | 4  | -16.548 | 52.430 | 62.972 | 1.00 32.05 | C |
| ATOM | 6644 | N   | GLY C | 5  | -15.172 | 51.578 | 58.539 | 1.00 31.12 | N |
| ATOM | 6645 | CA  | GLY C | 5  | -14.191 | 51.262 | 57.511 | 1.00 30.51 | C |
| ATOM | 6646 | C   | GLY C | 5  | -14.321 | 49.928 | 56.782 | 1.00 30.73 | C |
| ATOM | 6647 | O   | GLY C | 5  | -13.374 | 49.500 | 56.121 | 1.00 28.91 | O |
| ATOM | 6648 | N   | THR C | 6  | -15.465 | 49.254 | 56.867 | 1.00 30.29 | N |
| ATOM | 6649 | CA  | THR C | 6  | -15.592 | 47.970 | 56.174 | 1.00 29.80 | C |
| ATOM | 6650 | C   | THR C | 6  | -15.520 | 48.173 | 54.654 | 1.00 28.35 | C |
| ATOM | 6651 | O   | THR C | 6  | -16.144 | 49.069 | 54.107 | 1.00 27.80 | O |
| ATOM | 6652 | CB  | THR C | 6  | -16.911 | 47.271 | 56.558 | 1.00 31.71 | C |
| ATOM | 6653 | OG1 | THR C | 6  | -16.915 | 47.034 | 57.974 | 1.00 34.83 | O |
| ATOM | 6654 | CG2 | THR C | 6  | -17.031 | 45.934 | 55.845 | 1.00 32.83 | C |
| ATOM | 6655 | N   | PRO C | 7  | -14.737 | 47.345 | 53.957 | 1.00 28.28 | N |
| ATOM | 6656 | CA  | PRO C | 7  | -14.587 | 47.444 | 52.502 | 1.00 28.25 | C |
| ATOM | 6657 | C   | PRO C | 7  | -15.878 | 47.192 | 51.731 | 1.00 29.11 | C |
| ATOM | 6658 | O   | PRO C | 7  | -16.739 | 46.445 | 52.186 | 1.00 27.99 | O |
| ATOM | 6659 | CB  | PRO C | 7  | -13.572 | 46.359 | 52.172 | 1.00 27.95 | C |
| ATOM | 6660 | CG  | PRO C | 7  | -12.888 | 46.071 | 53.477 | 1.00 28.73 | C |
| ATOM | 6661 | CD  | PRO C | 7  | -13.975 | 46.207 | 54.486 | 1.00 28.60 | C |
| ATOM | 6662 | N   | LYS C | 8  | -15.987 | 47.805 | 50.559 | 1.00 28.49 | N |
| ATOM | 6663 | CA  | LYS C | 8  | -17.151 | 47.605 | 49.671 | 1.00 29.99 | C |
| ATOM | 6664 | C   | LYS C | 8  | -17.011 | 46.241 | 49.046 | 1.00 29.50 | C |
| ATOM | 6665 | O   | LYS C | 8  | -15.931 | 45.660 | 49.051 | 1.00 30.66 | O |
| ATOM | 6666 | CB  | LYS C | 8  | -17.158 | 48.628 | 48.534 | 1.00 29.74 | C |
| ATOM | 6667 | CG  | LYS C | 8  | -17.637 | 49.977 | 48.929 | 1.00 30.62 | C |
| ATOM | 6668 | CD  | LYS C | 8  | -17.373 | 50.984 | 47.827 | 1.00 32.65 | C |
| ATOM | 6669 | CE  | LYS C | 8  | -17.206 | 52.352 | 48.428 | 1.00 34.70 | C |
| ATOM | 6670 | NZ  | LYS C | 8  | -17.051 | 53.393 | 47.396 | 1.00 35.75 | N |
| ATOM | 6671 | N   | SER C | 9  | -18.098 | 45.711 | 48.494 | 1.00 29.85 | N |
| ATOM | 6672 | CA  | SER C | 9  | -18.004 | 44.411 | 47.846 | 1.00 28.35 | C |
| ATOM | 6673 | C   | SER C | 9  | -17.495 | 44.634 | 46.431 | 1.00 27.07 | C |
| ATOM | 6674 | O   | SER C | 9  | -17.681 | 45.697 | 45.876 | 1.00 26.20 | O |
| ATOM | 6675 | CB  | SER C | 9  | -19.388 | 43.759 | 47.743 | 1.00 28.93 | C |
| ATOM | 6676 | OG  | SER C | 9  | -20.232 | 44.553 | 46.918 | 1.00 30.24 | O |
| ATOM | 6677 | N   | ALA C | 10 | -16.887 | 43.612 | 45.839 | 1.00 28.10 | N |
| ATOM | 6678 | CA  | ALA C | 10 | -16.418 | 43.721 | 44.461 | 1.00 26.98 | C |
| ATOM | 6679 | C   | ALA C | 10 | -17.605 | 44.150 | 43.585 | 1.00 29.39 | C |
| ATOM | 6680 | O   | ALA C | 10 | -17.471 | 44.983 | 42.709 | 1.00 26.41 | O |
| ATOM | 6681 | CB  | ALA C | 10 | -15.876 | 42.394 | 44.001 | 1.00 27.15 | C |
| ATOM | 6682 | N   | GLU C | 11 | -18.786 | 43.600 | 43.862 | 1.00 30.48 | N |
| ATOM | 6683 | CA  | GLU C | 11 | -19.979 | 43.954 | 43.100 | 1.00 32.56 | C |
| ATOM | 6684 | C   | GLU C | 11 | -20.268 | 45.447 | 43.136 | 1.00 31.30 | C |
| ATOM | 6685 | O   | GLU C | 11 | -20.612 | 46.035 | 42.122 | 1.00 30.26 | O |
| ATOM | 6686 | CB  | GLU C | 11 | -21.210 | 43.219 | 43.650 | 1.00 35.82 | C |
| ATOM | 6687 | CG  | GLU C | 11 | -21.251 | 41.726 | 43.390 | 1.00 40.39 | C |
| ATOM | 6688 | CD  | GLU C | 11 | -20.144 | 40.952 | 44.091 | 1.00 43.83 | C |
| ATOM | 6689 | OE1 | GLU C | 11 | -19.848 | 41.228 | 45.281 | 1.00 44.80 | O |
| ATOM | 6690 | OE2 | GLU C | 11 | -19.579 | 40.040 | 43.444 | 1.00 47.34 | O |
| ATOM | 6691 | N   | GLN C | 12 | -20.169 | 46.048 | 44.316 | 1.00 31.29 | N |
| ATOM | 6692 | CA  | GLN C | 12 | -20.437 | 47.497 | 44.455 | 1.00 31.83 | C |
| ATOM | 6693 | C   | GLN C | 12 | -19.464 | 48.343 | 43.648 | 1.00 30.38 | C |
| ATOM | 6694 | O   | GLN C | 12 | -19.816 | 49.392 | 43.088 | 1.00 29.21 | O |
| ATOM | 6695 | CB  | GLN C | 12 | -20.283 | 47.951 | 45.906 | 1.00 33.58 | C |
| ATOM | 6696 | CG  | GLN C | 12 | -21.222 | 47.335 | 46.879 | 1.00 38.14 | C |
| ATOM | 6697 | CD  | GLN C | 12 | -21.056 | 47.957 | 48.252 | 1.00 40.24 | C |
| ATOM | 6698 | OE1 | GLN C | 12 | -21.223 | 49.174 | 48.419 | 1.00 40.20 | O |
| ATOM | 6699 | NE2 | GLN C | 12 | -20.715 | 47.129 | 49.241 | 1.00 42.01 | N |
| ATOM | 6700 | N   | ILE C | 13 | -18.209 | 47.910 | 43.663 | 1.00 29.05 | N |
| ATOM | 6701 | CA  | ILE C | 13 | -17.162 | 48.624 | 42.946 | 1.00 28.89 | C |
| ATOM | 6702 | C   | ILE C | 13 | -17.409 | 48.502 | 41.448 | 1.00 29.00 | C |
| ATOM | 6703 | O   | ILE C | 13 | -17.352 | 49.490 | 40.703 | 1.00 28.95 | O |
| ATOM | 6704 | CB  | ILE C | 13 | -15.783 | 48.032 | 43.297 | 1.00 28.44 | C |
| ATOM | 6705 | CG1 | ILE C | 13 | -15.478 | 48.284 | 44.767 | 1.00 28.17 | C |
| ATOM | 6706 | CG2 | ILE C | 13 | -14.705 | 48.642 | 42.409 | 1.00 27.84 | C |
| ATOM | 6707 | CD1 | ILE C | 13 | -14.225 | 47.597 | 45.221 | 1.00 28.83 | C |
| ATOM | 6708 | N   | GLN C | 14 | -17.680 | 47.277 | 41.008 | 1.00 29.98 | N |
| ATOM | 6709 | CA  | GLN C | 14 | -17.928 | 47.038 | 39.590 | 1.00 32.11 | C |
| ATOM | 6710 | C   | GLN C | 14 | -19.051 | 47.954 | 39.136 | 1.00 33.02 | C |
| ATOM | 6711 | O   | GLN C | 14 | -18.958 | 48.621 | 38.098 | 1.00 32.61 | O |
| ATOM | 6712 | CB  | GLN C | 14 | -18.327 | 45.590 | 39.346 | 1.00 31.05 | C |
| ATOM | 6713 | CG  | GLN C | 14 | -18.475 | 45.297 | 37.879 | 1.00 31.89 | C |

| ATOM | 6714 | CD | GLN C | 14 | -17.174 | 45.515 | 37.142 | 1.00 | 31.82 | C |
|------|------|-----|-------|----|---------|--------|--------|------|-------|---|
| ATOM | 6715 | OE1 | GLN C | 14 | -16.136 | 44.950 | 37.507 | 1.00 | 33.06 | O |
| ATOM | 6716 | NE2 | GLN C | 14 | -17.213 | 46.340 | 36.109 | 1.00 | 34.40 | N |
| ATOM | 6717 | N | GLN C | 15 | -20.109 | 47.994 | 39.943 | 1.00 | 35.12 | N |
| ATOM | 6718 | CA | GLN C | 15 | -21.248 | 48.834 | 39.636 | 1.00 | 36.59 | C |
| ATOM | 6719 | C | GLN C | 15 | -20.849 | 50.282 | 39.461 | 1.00 | 36.30 | C |
| ATOM | 6720 | O | GLN C | 15 | -21.362 | 50.958 | 38.585 | 1.00 | 35.79 | O |
| ATOM | 6721 | CB | GLN C | 15 | -22.292 | 48.744 | 40.731 | 1.00 | 39.06 | C |
| ATOM | 6722 | CG | GLN C | 15 | -23.409 | 49.734 | 40.519 | 1.00 | 43.23 | C |
| ATOM | 6723 | CD | GLN C | 15 | -24.581 | 49.497 | 41.442 | 1.00 | 46.20 | C |
| ATOM | 6724 | OE1 | GLN C | 15 | -25.051 | 48.358 | 41.597 | 1.00 | 48.05 | O |
| ATOM | 6725 | NE2 | GLN C | 15 | -25.080 | 50.571 | 42.047 | 1.00 | 46.64 | N |
| ATOM | 6726 | N | GLU C | 16 | -19.947 | 50.771 | 40.309 | 1.00 | 35.88 | N |
| ATOM | 6727 | CA | GLU C | 16 | -19.517 | 52.160 | 40.207 | 1.00 | 36.55 | C |
| ATOM | 6728 | C | GLU C | 16 | -18.777 | 52.382 | 38.899 | 1.00 | 35.16 | C |
| ATOM | 6729 | O | GLU C | 16 | -19.005 | 53.360 | 38.218 | 1.00 | 34.82 | O |
| ATOM | 6730 | CB | GLU C | 16 | -18.612 | 52.536 | 41.384 | 1.00 | 37.62 | C |
| ATOM | 6731 | CG | GLU C | 16 | -19.333 | 52.600 | 42.727 | 1.00 | 41.30 | C |
| ATOM | 6732 | CD | GLU C | 16 | -18.423 | 53.100 | 43.854 | 1.00 | 43.54 | C |
| ATOM | 6733 | OE1 | GLU C | 16 | -17.810 | 54.181 | 43.684 | 1.00 | 44.49 | O |
| ATOM | 6734 | OE2 | GLU C | 16 | -18.319 | 52.422 | 44.902 | 1.00 | 43.16 | O |
| ATOM | 6735 | N | TRP C | 17 | -17.895 | 51.456 | 38.546 | 1.00 | 34.62 | N |
| ATOM | 6736 | CA | TRP C | 17 | -17.152 | 51.590 | 37.308 | 1.00 | 34.30 | C |
| ATOM | 6737 | C | TRP C | 17 | -18.096 | 51.523 | 36.117 | 1.00 | 35.17 | C |
| ATOM | 6738 | O | TRP C | 17 | -17.850 | 52.148 | 35.081 | 1.00 | 35.02 | O |
| ATOM | 6739 | CB | TRP C | 17 | -16.110 | 50.478 | 37.184 | 1.00 | 33.32 | C |
| ATOM | 6740 | CG | TRP C | 17 | -15.039 | 50.510 | 38.227 | 1.00 | 30.88 | C |
| ATOM | 6741 | CD1 | TRP C | 17 | -14.789 | 51.506 | 39.131 | 1.00 | 32.82 | C |
| ATOM | 6742 | CD2 | TRP C | 17 | -14.070 | 49.491 | 38.469 | 1.00 | 29.92 | C |
| ATOM | 6743 | NE1 | TRP C | 17 | -13.716 | 51.161 | 39.930 | 1.00 | 31.16 | N |
| ATOM | 6744 | CE2 | TRP C | 17 | -13.256 | 49.929 | 39.540 | 1.00 | 29.72 | C |
| ATOM | 6745 | CE3 | TRP C | 17 | -13.809 | 48.241 | 37.883 | 1.00 | 29.33 | C |
| ATOM | 6746 | CZ2 | TRP C | 17 | -12.199 | 49.162 | 40.038 | 1.00 | 28.89 | C |
| ATOM | 6747 | CZ3 | TRP C | 17 | -12.757 | 47.475 | 38.381 | 1.00 | 30.21 | C |
| ATOM | 6748 | CH2 | TRP C | 17 | -11.963 | 47.944 | 39.452 | 1.00 | 27.94 | C |
| ATOM | 6749 | N | ASP C | 18 | -19.177 | 50.763 | 36.275 | 1.00 | 36.69 | N |
| ATOM | 6750 | CA | ASP C | 18 | -20.169 | 50.606 | 35.208 | 1.00 | 37.77 | C |
| ATOM | 6751 | C | ASP C | 18 | -21.131 | 51.767 | 35.011 | 1.00 | 37.61 | C |
| ATOM | 6752 | O | ASP C | 18 | -21.596 | 51.986 | 33.897 | 1.00 | 39.06 | O |
| ATOM | 6753 | CB | ASP C | 18 | -21.036 | 49.369 | 35.450 | 1.00 | 38.55 | C |
| ATOM | 6754 | CG | ASP C | 18 | -20.298 | 48.085 | 35.250 | 1.00 | 40.13 | C |
| ATOM | 6755 | OD1 | ASP C | 18 | -19.208 | 48.096 | 34.625 | 1.00 | 41.04 | O |
| ATOM | 6756 | OD2 | ASP C | 18 | -20.834 | 47.051 | 35.712 | 1.00 | 40.60 | O |
| ATOM | 6757 | N | THR C | 19 | -21.450 | 52.504 | 36.069 | 1.00 | 38.19 | N |
| ATOM | 6758 | CA | THR C | 19 | -22.441 | 53.568 | 35.949 | 1.00 | 37.47 | C |
| ATOM | 6759 | C | THR C | 19 | -22.018 | 54.989 | 36.176 | 1.00 | 36.90 | C |
| ATOM | 6760 | O | THR C | 19 | -22.655 | 55.903 | 35.669 | 1.00 | 36.26 | O |
| ATOM | 6761 | CB | THR C | 19 | -23.580 | 53.345 | 36.913 | 1.00 | 38.56 | C |
| ATOM | 6762 | OG1 | THR C | 19 | -23.068 | 53.398 | 38.252 | 1.00 | 40.48 | O |
| ATOM | 6763 | CG2 | THR C | 19 | -24.239 | 51.999 | 36.663 | 1.00 | 39.16 | C |
| ATOM | 6764 | N | ASN C | 20 | -20.978 | 55.191 | 36.976 | 1.00 | 36.15 | N |
| ATOM | 6765 | CA | ASN C | 20 | -20.506 | 56.542 | 37.244 | 1.00 | 35.02 | C |
| ATOM | 6766 | C | ASN C | 20 | -19.789 | 57.102 | 36.005 | 1.00 | 34.50 | C |
| ATOM | 6767 | O | ASN C | 20 | -18.830 | 56.507 | 35.503 | 1.00 | 34.36 | O |
| ATOM | 6768 | CB | ASN C | 20 | -19.573 | 56.534 | 38.461 | 1.00 | 34.75 | C |
| ATOM | 6769 | CG | ASN C | 20 | -19.201 | 57.936 | 38.927 | 1.00 | 33.59 | C |
| ATOM | 6770 | OD1 | ASN C | 20 | -19.234 | 58.894 | 38.159 | 1.00 | 33.43 | O |
| ATOM | 6771 | ND2 | ASN C | 20 | -18.819 | 58.051 | 40.190 | 1.00 | 34.45 | N |
| ATOM | 6772 | N | PRO C | 21 | -20.261 | 58.252 | 35.484 | 1.00 | 33.86 | N |
| ATOM | 6773 | CA | PRO C | 21 | -19.690 | 58.909 | 34.301 | 1.00 | 33.30 | C |
| ATOM | 6774 | C | PRO C | 21 | -18.214 | 59.217 | 34.486 | 1.00 | 32.37 | C |
| ATOM | 6775 | O | PRO C | 21 | -17.451 | 59.390 | 33.524 | 1.00 | 29.62 | O |
| ATOM | 6776 | CB | PRO C | 21 | -20.539 | 60.176 | 34.168 | 1.00 | 33.44 | C |
| ATOM | 6777 | CG | PRO C | 21 | -21.863 | 59.726 | 34.661 | 1.00 | 35.00 | C |
| ATOM | 6778 | CD | PRO C | 21 | -21.501 | 58.935 | 35.908 | 1.00 | 34.79 | C |
| ATOM | 6779 | N | ARG C | 22 | -17.830 | 59.292 | 35.755 | 1.00 | 31.44 | N |
| ATOM | 6780 | CA | ARG C | 22 | -16.454 | 59.556 | 36.113 | 1.00 | 30.21 | C |
| ATOM | 6781 | C | ARG C | 22 | -15.539 | 58.563 | 35.394 | 1.00 | 30.20 | C |
| ATOM | 6782 | O | ARG C | 22 | -14.483 | 58.921 | 34.897 | 1.00 | 31.06 | O |
| ATOM | 6783 | CB | ARG C | 22 | -16.283 | 59.406 | 37.630 | 1.00 | 28.34 | C |
| ATOM | 6784 | CG | ARG C | 22 | -14.832 | 59.551 | 38.086 | 1.00 | 26.26 | C |
| ATOM | 6785 | CD | ARG C | 22 | -14.234 | 60.865 | 37.626 | 1.00 | 23.88 | C |
| ATOM | 6786 | NE | ARG C | 22 | -12.847 | 60.974 | 38.082 | 1.00 | 21.08 | N |
| ATOM | 6787 | CZ | ARG C | 22 | -11.802 | 60.515 | 37.403 | 1.00 | 21.52 | C |
| ATOM | 6788 | NH1 | ARG C | 22 | -11.980 | 59.906 | 36.228 | 1.00 | 13.91 | N |
| ATOM | 6789 | NH2 | ARG C | 22 | -10.561 | 60.688 | 37.891 | 1.00 | 21.01 | N |
| ATOM | 6790 | N | TRP C | 23 | -15.978 | 57.319 | 35.329 | 1.00 | 30.31 | N |
| ATOM | 6791 | CA | TRP C | 23 | -15.213 | 56.234 | 34.741 | 1.00 | 30.70 | C |
| ATOM | 6792 | C | TRP C | 23 | -15.550 | 55.926 | 33.304 | 1.00 | 32.06 | C |
| ATOM | 6793 | O | TRP C | 23 | -15.196 | 54.852 | 32.812 | 1.00 | 31.21 | O |

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ATOM   6794  CB  TRP C  23     -15.430  54.992  35.598  1.00 29.13          C
ATOM   6795  CG  TRP C  23     -15.241  55.306  37.034  1.00 28.55          C
ATOM   6796  CD1 TRP C  23     -16.095  55.028  38.058  1.00 27.25          C
ATOM   6797  CD2 TRP C  23     -14.089  55.923  37.624  1.00 27.92          C
ATOM   6798  NE1 TRP C  23     -15.543  55.426  39.252  1.00 27.55          N
ATOM   6799  CE2 TRP C  23     -14.313  55.980  39.014  1.00 28.51          C
ATOM   6800  CE3 TRP C  23     -12.883  56.429  37.109  1.00 28.00          C
ATOM   6801  CZ2 TRP C  23     -13.372  56.523  39.905  1.00 28.08          C
ATOM   6802  CZ3 TRP C  23     -11.962  56.960  37.984  1.00 27.13          C
ATOM   6803  CH2 TRP C  23     -12.208  57.003  39.363  1.00 27.01          C
ATOM   6804  N   LYS C  24     -16.209  56.872  32.635  1.00 33.85          N
ATOM   6805  CA  LYS C  24     -16.645  56.708  31.246  1.00 36.26          C
ATOM   6806  C   LYS C  24     -15.564  56.243  30.288  1.00 36.99          C
ATOM   6807  O   LYS C  24     -15.732  55.240  29.601  1.00 37.34          O
ATOM   6808  CB  LYS C  24     -17.238  58.020  30.705  1.00 38.37          C
ATOM   6809  CG  LYS C  24     -17.952  57.863  29.367  1.00 41.25          C
ATOM   6810  CD  LYS C  24     -18.392  59.209  28.765  1.00 44.10          C
ATOM   6811  CE  LYS C  24     -17.219  59.907  28.072  1.00 45.26          C
ATOM   6812  NZ  LYS C  24     -17.516  61.294  27.620  1.00 45.84          N
ATOM   6813  N   ASP C  25     -14.442  56.952  30.237  1.00 36.77          N
ATOM   6814  CA  ASP C  25     -13.406  56.564  29.279  1.00 37.49          C
ATOM   6815  C   ASP C  25     -12.171  55.925  29.905  1.00 35.38          C
ATOM   6816  O   ASP C  25     -11.094  55.906  29.306  1.00 33.89          O
ATOM   6817  CB  ASP C  25     -13.006  57.792  28.450  1.00 39.71          C
ATOM   6818  CG  ASP C  25     -14.217  58.514  27.863  1.00 41.97          C
ATOM   6819  OD1 ASP C  25     -15.070  57.804  27.295  1.00 43.74          O
ATOM   6820  OD2 ASP C  25     -14.313  59.765  27.957  1.00 41.58          O
ATOM   6821  N   VAL C  26     -12.361  55.370  31.097  1.00 32.64          N
ATOM   6822  CA  VAL C  26     -11.287  54.737  31.849  1.00 29.52          C
ATOM   6823  C   VAL C  26     -11.151  53.221  31.729  1.00 27.66          C
ATOM   6824  O   VAL C  26     -12.050  52.467  32.115  1.00 28.72          O
ATOM   6825  CB  VAL C  26     -11.417  55.118  33.333  1.00 28.15          C
ATOM   6826  CG1 VAL C  26     -10.352  54.424  34.169  1.00 27.31          C
ATOM   6827  CG2 VAL C  26     -11.296  56.620  33.466  1.00 26.70          C
ATOM   6828  N   THR C  27     -10.016  52.770  31.201  1.00 25.36          N
ATOM   6829  CA  THR C  27      -9.755  51.344  31.089  1.00 25.93          C
ATOM   6830  C   THR C  27      -9.000  50.844  32.329  1.00 25.90          C
ATOM   6831  O   THR C  27      -8.024  51.465  32.773  1.00 23.29          O
ATOM   6832  CB  THR C  27      -8.869  51.031  29.864  1.00 26.70          C
ATOM   6833  OG1 THR C  27      -9.583  51.360  28.663  1.00 29.89          O
ATOM   6834  CG2 THR C  27      -8.449  49.560  29.856  1.00 27.33          C
ATOM   6835  N   ARG C  28      -9.462  49.744  32.908  1.00 24.79          N
ATOM   6836  CA  ARG C  28      -8.775  49.149  34.040  1.00 24.33          C
ATOM   6837  C   ARG C  28      -8.526  47.699  33.632  1.00 26.32          C
ATOM   6838  O   ARG C  28      -9.470  46.898  33.445  1.00 23.80          O
ATOM   6839  CB  ARG C  28      -9.621  49.202  35.304  1.00 24.06          C
ATOM   6840  CG  ARG C  28      -9.874  50.606  35.899  1.00 24.34          C
ATOM   6841  CD  ARG C  28     -10.780  50.468  37.123  1.00 22.59          C
ATOM   6842  NE  ARG C  28     -10.849  51.636  38.006  1.00 23.38          N
ATOM   6843  CZ  ARG C  28     -11.649  52.704  37.847  1.00 26.45          C
ATOM   6844  NH1 ARG C  28     -12.489  52.810  36.815  1.00 22.70          N
ATOM   6845  NH2 ARG C  28     -11.640  53.681  38.757  1.00 25.85          N
ATOM   6846  N   THR C  29      -7.256  47.352  33.464  1.00 24.73          N
ATOM   6847  CA  THR C  29      -6.927  46.003  33.077  1.00 24.49          C
ATOM   6848  C   THR C  29      -7.024  44.967  34.205  1.00 24.59          C
ATOM   6849  O   THR C  29      -6.818  43.783  33.953  1.00 24.93          O
ATOM   6850  CB  THR C  29      -5.540  45.958  32.409  1.00 23.90          C
ATOM   6851  OG1 THR C  29      -4.553  46.437  33.335  1.00 21.58          O
ATOM   6852  CG2 THR C  29      -5.553  46.853  31.146  1.00 22.86          C
ATOM   6853  N   TYR C  30      -7.332  45.399  35.431  1.00 23.28          N
ATOM   6854  CA  TYR C  30      -7.513  44.473  36.549  1.00 24.12          C
ATOM   6855  C   TYR C  30      -8.991  44.437  36.947  1.00 24.24          C
ATOM   6856  O   TYR C  30      -9.778  45.256  36.442  1.00 25.06          O
ATOM   6857  CB  TYR C  30      -6.646  44.879  37.744  1.00 21.47          C
ATOM   6858  CG  TYR C  30      -6.750  46.337  38.059  1.00 20.08          C
ATOM   6859  CD1 TYR C  30      -7.819  46.829  38.783  1.00 19.72          C
ATOM   6860  CD2 TYR C  30      -5.785  47.219  37.612  1.00 18.19          C
ATOM   6861  CE1 TYR C  30      -7.934  48.157  39.053  1.00 20.76          C
ATOM   6862  CE2 TYR C  30      -5.876  48.571  37.886  1.00 20.75          C
ATOM   6863  CZ  TYR C  30      -6.953  49.036  38.602  1.00 19.50          C
ATOM   6864  OH  TYR C  30      -7.069  50.363  38.822  1.00 17.79          O
ATOM   6865  N   SER C  31      -9.367  43.515  37.843  1.00 24.30          N
ATOM   6866  CA  SER C  31     -10.784  43.368  38.275  1.00 26.01          C
ATOM   6867  C   SER C  31     -11.131  44.040  39.596  1.00 26.63          C
ATOM   6868  O   SER C  31     -10.248  44.444  40.351  1.00 25.50          O
ATOM   6869  CB  SER C  31     -11.140  41.895  38.429  1.00 26.47          C
ATOM   6870  OG  SER C  31     -10.247  41.303  39.357  1.00 27.23          O
ATOM   6871  N   ALA C  32     -12.426  44.132  39.878  1.00 25.62          N
ATOM   6872  CA  ALA C  32     -12.891  44.734  41.124  1.00 25.56          C
ATOM   6873  C   ALA C  32     -12.481  43.792  42.242  1.00 26.22          C
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ATOM   6874  O    ALA C  32    -12.069  44.217  43.308  1.00 24.19           O
ATOM   6875  CB   ALA C  32    -14.397  44.903  41.081  1.00 25.99           C
ATOM   6876  N    GLU C  33.   -12.608  42.494  41.995  1.00 26.19           N
ATOM   6877  CA   GLU C  33    -12.219  41.500  42.977  1.00 27.92           C
ATOM   6878  C    GLU C  33    -10.734  41.707  43.314  1.00 26.88           C
ATOM   6879  O    GLU C  33    -10.315  41.486  44.456  1.00 25.80           O
ATOM   6880  CB   GLU C  33    -12.407  40.086  42.417  1.00 29.98           C
ATOM   6881  CG   GLU C  33    -13.839  39.739  41.913  1.00 37.16           C
ATOM   6882  CD   GLU C  33    -14.427  40.715  40.839  1.00 39.86           C
ATOM   6883  OE1  GLU C  33    -13.711  41.184  39.900  1.00 36.63           O
ATOM   6884  OE2  GLU C  33    -15.652  40.989  40.942  1.00 43.45           O
ATOM   6885  N    ASP C  34     -9.948  42.103  42.315  1.00 24.55           N
ATOM   6886  CA   ASP C  34     -8.526  42.353  42.545  1.00 24.09           C
ATOM   6887  C    ASP C  34     -8.332  43.536  43.491  1.00 24.12           C
ATOM   6888  O    ASP C  34     -7.419  43.522  44.314  1.00 24.32           O
ATOM   6889  CB   ASP C  34     -7.793  42.666  41.242  1.00 25.16           C
ATOM   6890  CG   ASP C  34     -7.616  41.458  40.349  1.00 26.54           C
ATOM   6891  OD1  ASP C  34     -7.531  40.312  40.843  1.00 27.12           O
ATOM   6892  OD2  ASP C  34     -7.525  41.678  39.129  1.00 28.72           O
ATOM   6893  N    VAL C  35     -9.178  44.555  43.366  1.00 21.44           N
ATOM   6894  CA   VAL C  35     -9.087  45.723  44.240  1.00 22.27           C
ATOM   6895  C    VAL C  35     -9.418  45.324  45.682  1.00 22.84           C
ATOM   6896  O    VAL C  35     -8.668  45.640  46.626  1.00 19.61           O
ATOM   6897  CB   VAL C  35    -10.061  46.826  43.795  1.00 20.21           C
ATOM   6898  CG1  VAL C  35    -10.119  47.955  44.846  1.00 19.37           C
ATOM   6899  CG2  VAL C  35     -9.624  47.387  42.482  1.00 21.03           C
ATOM   6900  N    VAL C  36    -10.539  44.610  45.850  1.00 22.12           N
ATOM   6901  CA   VAL C  36    -10.963  44.173  47.168  1.00 22.71           C
ATOM   6902  C    VAL C  36     -9.971  43.246  47.858  1.00 22.98           C
ATOM   6903  O    VAL C  36     -9.828  43.290  49.082  1.00 24.38           O
ATOM   6904  CB   VAL C  36    -12.333  43.467  47.105  1.00 22.98           C
ATOM   6905  CG1  VAL C  36    -12.656  42.872  48.441  1.00 26.32           C
ATOM   6906  CG2  VAL C  36    -13.402  44.459  46.728  1.00 21.54           C
ATOM   6907  N    ALA C  37     -9.296  42.395  47.101  1.00 20.62           N
ATOM   6908  CA   ALA C  37     -8.319  41.496  47.697  1.00 21.50           C
ATOM   6909  C    ALA C  37     -7.186  42.222  48.423  1.00 21.07           C
ATOM   6910  O    ALA C  37     -6.576  41.655  49.357  1.00 21.09           O
ATOM   6911  CB   ALA C  37     -7.690  40.610  46.621  1.00 21.85           C
ATOM   6912  N    LEU C  38     -6.880  43.435  47.951  1.00 20.18           N
ATOM   6913  CA   LEU C  38     -5.772  44.228  48.500  1.00 20.18           C
ATOM   6914  C    LEU C  38     -6.160  45.198  49.623  1.00 21.79           C
ATOM   6915  O    LEU C  38     -5.281  45.824  50.230  1.00 20.27           O
ATOM   6916  CB   LEU C  38     -5.084  45.006  47.358  1.00 21.34           C
ATOM   6917  CG   LEU C  38     -4.453  44.199  46.208  1.00 19.99           C
ATOM   6918  CD1  LEU C  38     -3.939  45.147  45.098  1.00 22.42           C
ATOM   6919  CD2  LEU C  38     -3.308  43.334  46.743  1.00 23.00           C
ATOM   6920  N    GLN C  39     -7.459  45.316  49.925  1.00 19.48           N
ATOM   6921  CA   GLN C  39     -7.909  46.247  50.959  1.00 19.63           C
ATOM   6922  C    GLN C  39     -7.950  45.762  52.413  1.00 21.42           C
ATOM   6923  O    GLN C  39     -8.312  46.510  53.312  1.00 23.97           O
ATOM   6924  CB   GLN C  39     -9.286  46.787  50.584  1.00 19.52           C
ATOM   6925  CG   GLN C  39     -9.304  47.572  49.310  1.00 20.46           C
ATOM   6926  CD   GLN C  39    -10.724  48.017  48.910  1.00 22.10           C
ATOM   6927  OE1  GLN C  39    -11.671  47.236  49.015  1.00 20.94           O
ATOM   6928  NE2  GLN C  39    -10.862  49.245  48.441  1.00 19.11           N
ATOM   6929  N    GLY C  40     -7.594  44.520  52.671  1.00 22.65           N
ATOM   6930  CA   GLY C  40     -7.641  44.070  54.054  1.00 24.39           C
ATOM   6931  C    GLY C  40     -9.069  44.189  54.555  1.00 26.48           C
ATOM   6932  O    GLY C  40    -10.022  44.231  53.745  1.00 26.97           O
ATOM   6933  N    SER C  41     -9.252  44.279  55.868  1.00 25.72           N
ATOM   6934  CA   SER C  41    -10.620  44.336  56.378  1.00 25.88           C
ATOM   6935  C    SER C  41    -11.094  45.707  56.795  1.00 24.87           C
ATOM   6936  O    SER C  41    -12.221  45.885  57.248  1.00 23.46           O
ATOM   6937  CB   SER C  41    -10.768  43.344  57.514  1.00 26.54           C
ATOM   6938  OG   SER C  41     -9.748  43.583  58.460  1.00 29.77           O
ATOM   6939  N    VAL C  42    -10.236  46.695  56.625  1.00 23.82           N
ATOM   6940  CA   VAL C  42    -10.606  48.061  56.972  1.00 24.14           C
ATOM   6941  C    VAL C  42    -10.004  48.992  55.918  1.00 23.66           C
ATOM   6942  O    VAL C  42     -8.866  48.811  55.506  1.00 24.43           O
ATOM   6943  CB   VAL C  42    -10.099  48.410  58.399  1.00 23.10           C
ATOM   6944  CG1  VAL C  42    -10.317  49.871  58.725  1.00 23.22           C
ATOM   6945  CG2  VAL C  42    -10.815  47.552  59.398  1.00 26.67           C
ATOM   6946  N    VAL C  43    -10.793  49.942  55.442  1.00 22.39           N
ATOM   6947  CA   VAL C  43    -10.349  50.901  54.433  1.00 22.54           C
ATOM   6948  C    VAL C  43    -10.379  52.305  55.015  1.00 22.19           C
ATOM   6949  O    VAL C  43    -11.439  52.822  55.351  1.00 21.01           O
ATOM   6950  CB   VAL C  43    -11.244  50.887  53.171  1.00 21.28           C
ATOM   6951  CG1  VAL C  43    -10.854  52.034  52.251  1.00 23.60           C
ATOM   6952  CG2  VAL C  43    -11.105  49.570  52.429  1.00 24.48           C
ATOM   6953  N    GLU C  44     -9.214  52.939  55.156  1.00 20.12           N
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| ATOM | 6954 | CA | GLU C | 44 | -9.214 | 54.287 | 55.726 | 1.00 | 19.67 | C |
| ATOM | 6955 | C | GLU C | 44 | -9.869 | 55.275 | 54.779 | 1.00 | 20.16 | C |
| ATOM | 6956 | O | GLU C | 44 | -9.683 | 55.192 | 53.574 | 1.00 | 20.56 | O |
| ATOM | 6957 | CB | GLU C | 44 | -7.770 | 54.774 | 55.994 | 1.00 | 18.28 | C |
| ATOM | 6958 | CG | GLU C | 44 | -7.118 | 54.173 | 57.205 | 1.00 | 19.44 | C |
| ATOM | 6959 | CD | GLU C | 44 | -5.697 | 54.725 | 57.403 | 1.00 | 19.02 | C |
| ATOM | 6960 | OE1 | GLU C | 44 | -4.806 | 54.341 | 56.632 | 1.00 | 18.65 | O |
| ATOM | 6961 | OE2 | GLU C | 44 | -5.495 | 55.564 | 58.293 | 1.00 | 21.10 | O |
| ATOM | 6962 | N | GLU C | 45 | -10.617 | 56.231 | 55.328 | 1.00 | 20.66 | N |
| ATOM | 6963 | CA | GLU C | 45 | -11.252 | 57.256 | 54.521 | 1.00 | 21.30 | C |
| ATOM | 6964 | C | GLU C | 45 | -10.209 | 58.341 | 54.315 | 1.00 | 22.13 | C |
| ATOM | 6965 | O | GLU C | 45 | -9.446 | 58.656 | 55.221 | 1.00 | 23.64 | O |
| ATOM | 6966 | CB | GLU C | 45 | -12.475 | 57.843 | 55.242 | 1.00 | 24.06 | C |
| ATOM | 6967 | CG | GLU C | 45 | -13.115 | 59.091 | 54.577 | 1.00 | 24.92 | C |
| ATOM | 6968 | CD | GLU C | 45 | -13.751 | 58.827 | 53.198 | 1.00 | 28.98 | C |
| ATOM | 6969 | OE1 | GLU C | 45 | -13.930 | 57.661 | 52.805 | 1.00 | 33.07 | O |
| ATOM | 6970 | OE2 | GLU C | 45 | -14.079 | 59.800 | 52.499 | 1.00 | 31.21 | O |
| ATOM | 6971 | N | HIS C | 46 | -10.159 | 58.894 | 53.119 | 1.00 | 20.83 | N |
| ATOM | 6972 | CA | HIS C | 46 | -9.211 | 59.950 | 52.797 | 1.00 | 20.72 | C |
| ATOM | 6973 | C | HIS C | 46 | -10.050 | 61.143 | 52.341 | 1.00 | 19.72 | C |
| ATOM | 6974 | O | HIS C | 46 | -10.142 | 61.454 | 51.147 | 1.00 | 21.41 | O |
| ATOM | 6975 | CB | HIS C | 46 | -8.238 | 59.468 | 51.678 | 1.00 | 18.82 | C |
| ATOM | 6976 | CG | HIS C | 46 | -7.344 | 58.322 | 52.098 | 1.00 | 17.14 | C |
| ATOM | 6977 | ND1 | HIS C | 46 | -6.446 | 58.429 | 53.129 | 1.00 | 16.24 | N |
| ATOM | 6978 | CD2 | HIS C | 46 | -7.218 | 57.062 | 51.623 | 1.00 | 17.64 | C |
| ATOM | 6979 | CE1 | HIS C | 46 | -5.801 | 57.280 | 53.283 | 1.00 | 18.33 | C |
| ATOM | 6980 | NE2 | HIS C | 46 | -6.257 | 56.428 | 52.377 | 1.00 | 16.67 | N |
| ATOM | 6981 | N | THR C | 47 | -10.665 | 61.809 | 53.309 | 1.00 | 19.44 | N |
| ATOM | 6982 | CA | THR C | 47 | -11.531 | 62.953 | 53.058 | 1.00 | 19.54 | C |
| ATOM | 6983 | C | THR C | 47 | -11.029 | 64.005 | 52.068 | 1.00 | 20.12 | C |
| ATOM | 6984 | O | THR C | 47 | -11.737 | 64.343 | 51.095 | 1.00 | 20.78 | O |
| ATOM | 6985 | CB | THR C | 47 | -11.898 | 63.667 | 54.400 | 1.00 | 20.35 | C |
| ATOM | 6986 | OG1 | THR C | 47 | -12.579 | 62.739 | 55.258 | 1.00 | 20.71 | O |
| ATOM | 6987 | CG2 | THR C | 47 | -12.772 | 64.921 | 54.143 | 1.00 | 20.59 | C |
| ATOM | 6988 | N | LEU C | 48 | -9.842 | 64.564 | 52.315 | 1.00 | 18.81 | N |
| ATOM | 6989 | CA | LEU C | 48 | -9.305 | 65.593 | 51.432 | 1.00 | 17.57 | C |
| ATOM | 6990 | C | LEU C | 48 | -9.013 | 65.121 | 50.010 | 1.00 | 16.18 | C |
| ATOM | 6991 | O | LEU C | 48 | -9.262 | 65.828 | 49.052 | 1.00 | 17.26 | O |
| ATOM | 6992 | CB | LEU C | 48 | -8.058 | 66.239 | 52.056 | 1.00 | 17.08 | C |
| ATOM | 6993 | CG | LEU C | 48 | -8.296 | 66.917 | 53.418 | 1.00 | 18.65 | C |
| ATOM | 6994 | CD1 | LEU C | 48 | -7.009 | 67.717 | 53.800 | 1.00 | 20.03 | C |
| ATOM | 6995 | CD2 | LEU C | 48 | -9.543 | 67.870 | 53.358 | 1.00 | 19.49 | C |
| ATOM | 6996 | N | ALA C | 49 | -8.442 | 63.930 | 49.881 | 1.00 | 16.21 | N |
| ATOM | 6997 | CA | ALA C | 49 | -8.168 | 63.349 | 48.594 | 1.00 | 16.27 | C |
| ATOM | 6998 | C | ALA C | 49 | -9.514 | 63.141 | 47.857 | 1.00 | 18.71 | C |
| ATOM | 6999 | O | ALA C | 49 | -9.634 | 63.445 | 46.682 | 1.00 | 17.40 | O |
| ATOM | 7000 | CB | ALA C | 49 | -7.456 | 62.003 | 48.788 | 1.00 | 15.57 | C |
| ATOM | 7001 | N | ARG C | 50 | -10.523 | 62.639 | 48.563 | 1.00 | 20.23 | N |
| ATOM | 7002 | CA | ARG C | 50 | -11.812 | 62.393 | 47.901 | 1.00 | 23.17 | C |
| ATOM | 7003 | C | ARG C | 50 | -12.424 | 63.700 | 47.444 | 1.00 | 23.41 | C |
| ATOM | 7004 | O | ARG C | 50 | -12.789 | 63.866 | 46.279 | 1.00 | 25.98 | O |
| ATOM | 7005 | CB | ARG C | 50 | -12.794 | 61.699 | 48.829 | 1.00 | 22.97 | C |
| ATOM | 7006 | CG | ARG C | 50 | -14.114 | 61.377 | 48.148 | 1.00 | 25.09 | C |
| ATOM | 7007 | CD | ARG C | 50 | -15.036 | 60.781 | 49.151 | 1.00 | 25.34 | C |
| ATOM | 7008 | NE | ARG C | 50 | -14.441 | 59.592 | 49.769 | 1.00 | 23.74 | N |
| ATOM | 7009 | CZ | ARG C | 50 | -14.139 | 58.473 | 49.116 | 1.00 | 24.32 | C |
| ATOM | 7010 | NH1 | ARG C | 50 | -14.378 | 58.361 | 47.806 | 1.00 | 24.34 | N |
| ATOM | 7011 | NH2 | ARG C | 50 | -13.577 | 57.464 | 49.771 | 1.00 | 23.88 | N |
| ATOM | 7012 | N | ARG C | 51 | -12.557 | 64.623 | 48.380 | 1.00 | 24.63 | N |
| ATOM | 7013 | CA | ARG C | 51 | -13.139 | 65.923 | 48.095 | 1.00 | 23.32 | C |
| ATOM | 7014 | C | ARG C | 51 | -12.375 | 66.621 | 47.008 | 1.00 | 23.58 | C |
| ATOM | 7015 | O | ARG C | 51 | -12.964 | 67.091 | 46.030 | 1.00 | 24.17 | O |
| ATOM | 7016 | CB | ARG C | 51 | -13.130 | 66.800 | 49.350 | 1.00 | 25.90 | C |
| ATOM | 7017 | CG | ARG C | 51 | -13.935 | 68.104 | 49.247 | 1.00 | 26.90 | C |
| ATOM | 7018 | CD | ARG C | 51 | -13.896 | 68.784 | 50.611 | 1.00 | 26.88 | C |
| ATOM | 7019 | NE | ARG C | 51 | -14.965 | 69.762 | 50.812 | 1.00 | 28.36 | N |
| ATOM | 7020 | CZ | ARG C | 51 | -14.930 | 71.025 | 50.399 | 1.00 | 27.44 | C |
| ATOM | 7021 | NH1 | ARG C | 51 | -13.882 | 71.505 | 49.741 | 1.00 | 28.74 | N |
| ATOM | 7022 | NH2 | ARG C | 51 | -15.955 | 71.827 | 50.683 | 1.00 | 29.79 | N |
| ATOM | 7023 | N | GLY C | 52 | -11.057 | 66.707 | 47.159 | 1.00 | 21.02 | N |
| ATOM | 7024 | CA | GLY C | 52 | -10.277 | 67.394 | 46.146 | 1.00 | 19.11 | C |
| ATOM | 7025 | C | GLY C | 52 | -10.407 | 66.778 | 44.762 | 1.00 | 18.38 | C |
| ATOM | 7026 | O | GLY C | 52 | -10.529 | 67.497 | 43.767 | 1.00 | 18.72 | O |
| ATOM | 7027 | N | ALA C | 53 | -10.379 | 65.445 | 44.678 | 1.00 | 21.24 | N |
| ATOM | 7028 | CA | ALA C | 53 | -10.499 | 64.779 | 43.374 | 1.00 | 21.10 | C |
| ATOM | 7029 | C | ALA C | 53 | -11.887 | 65.056 | 42.758 | 1.00 | 20.50 | C |
| ATOM | 7030 | O | ALA C | 53 | -11.999 | 65.288 | 41.559 | 1.00 | 22.57 | O |
| ATOM | 7031 | CB | ALA C | 53 | -10.289 | 63.253 | 43.508 | 1.00 | 20.61 | C |
| ATOM | 7032 | N | GLU C | 54 | -12.930 | 64.984 | 43.573 | 1.00 | 20.86 | N |
| ATOM | 7033 | CA | GLU C | 54 | -14.266 | 65.235 | 43.039 | 1.00 | 23.50 | C |

| ATOM | 7034 | C | GLU C | 54 | -14.304 | 66.666 | 42.566 | 1.00 23.19 | C |
|------|------|-----|-------|----|---------|--------|--------|-----------|---|
| ATOM | 7035 | O | GLU C | 54 | -14.698 | 66.930 | 41.434 | 1.00 24.20 | O |
| ATOM | 7036 | CB | GLU C | 54 | -15.344 | 64.998 | 44.101 | 1.00 24.60 | C |
| ATOM | 7037 | CG | GLU C | 54 | -15.517 | 63.535 | 44.435 | 1.00 28.12 | C |
| ATOM | 7038 | CD | GLU C | 54 | -16.674 | 63.280 | 45.360 | 1.00 31.58 | C |
| ATOM | 7039 | OE1 | GLU C | 54 | -17.201 | 64.261 | 45.926 | 1.00 33.26 | O |
| ATOM | 7040 | OE2 | GLU C | 54 | -17.045 | 62.099 | 45.528 | 1.00 32.61 | O |
| ATOM | 7041 | N | VAL C | 55 | -13.861 | 67.593 | 43.410 | 1.00 23.96 | N |
| ATOM | 7042 | CA | VAL C | 55 | -13.911 | 69.016 | 43.036 | 1.00 24.72 | C |
| ATOM | 7043 | C | VAL C | 55 | -13.167 | 69.337 | 41.754 | 1.00 25.69 | C |
| ATOM | 7044 | O | VAL C | 55 | -13.693 | 70.049 | 40.878 | 1.00 25.05 | O |
| ATOM | 7045 | CB | VAL C | 55 | -13.388 | 69.935 | 44.170 | 1.00 23.51 | C |
| ATOM | 7046 | CG1 | VAL C | 55 | -13.345 | 71.355 | 43.700 | 1.00 23.17 | C |
| ATOM | 7047 | CG2 | VAL C | 55 | -14.274 | 69.804 | 45.413 | 1.00 22.39 | C |
| ATOM | 7048 | N | LEU C | 56 | -11.951 | 68.809 | 41.631 | 1.00 24.21 | N |
| ATOM | 7049 | CA | LEU C | 56 | -11.127 | 69.039 | 40.454 | 1.00 23.48 | C |
| ATOM | 7050 | C | LEU C | 56 | -11.772 | 68.496 | 39.186 | 1.00 24.03 | C |
| ATOM | 7051 | O | LEU C | 56 | -11.627 | 69.084 | 38.115 | 1.00 23.71 | O |
| ATOM | 7052 | CB | LEU C | 56 | -9.756 | 68.353 | 40.600 | 1.00 23.90 | C |
| ATOM | 7053 | CG | LEU C | 56 | -8.820 | 68.474 | 39.379 | 1.00 23.66 | C |
| ATOM | 7054 | CD1 | LEU C | 56 | -8.537 | 69.933 | 39.124 | 1.00 20.80 | C |
| ATOM | 7055 | CD2 | LEU C | 56 | -7.509 | 67.699 | 39.621 | 1.00 21.90 | C |
| ATOM | 7056 | N | TRP C | 57 | -12.425 | 67.339 | 39.299 | 1.00 24.27 | N |
| ATOM | 7057 | CA | TRP C | 57 | -13.078 | 66.733 | 38.141 | 1.00 27.71 | C |
| ATOM | 7058 | C | TRP C | 57 | -14.221 | 67.679 | 37.694 | 1.00 29.36 | C |
| ATOM | 7059 | O | TRP C | 57 | -14.331 | 68.026 | 36.508 | 1.00 29.50 | O |
| ATOM | 7060 | CB | TRP C | 57 | -13.626 | 65.348 | 38.517 | 1.00 27.15 | C |
| ATOM | 7061 | CG | TRP C | 57 | -14.156 | 64.595 | 37.353 | 1.00 29.63 | C |
| ATOM | 7062 | CD1 | TRP C | 57 | -15.438 | 64.143 | 37.184 | 1.00 31.27 | C |
| ATOM | 7063 | CD2 | TRP C | 57 | -13.416 | 64.144 | 36.208 | 1.00 30.45 | C |
| ATOM | 7064 | NE1 | TRP C | 57 | -15.537 | 63.432 | 36.005 | 1.00 31.61 | N |
| ATOM | 7065 | CE2 | TRP C | 57 | -14.313 | 63.415 | 35.390 | 1.00 31.48 | C |
| ATOM | 7066 | CE3 | TRP C | 57 | -12.082 | 64.280 | 35.796 | 1.00 31.63 | C |
| ATOM | 7067 | CZ2 | TRP C | 57 | -13.919 | 62.822 | 34.187 | 1.00 31.87 | C |
| ATOM | 7068 | CZ3 | TRP C | 57 | -11.691 | 63.686 | 34.597 | 1.00 32.35 | C |
| ATOM | 7069 | CH2 | TRP C | 57 | -12.608 | 62.967 | 33.809 | 1.00 31.01 | C |
| ATOM | 7070 | N | GLU C | 58 | -15.046 | 68.115 | 38.647 | 1.00 30.55 | N |
| ATOM | 7071 | CA | GLU C | 58 | -16.146 | 69.036 | 38.326 | 1.00 32.46 | C |
| ATOM | 7072 | C | GLU C | 58 | -15.602 | 70.291 | 37.659 | 1.00 32.18 | C |
| ATOM | 7073 | O | GLU C | 58 | -16.109 | 70.721 | 36.620 | 1.00 32.57 | O |
| ATOM | 7074 | CB | GLU C | 58 | -16.885 | 69.493 | 39.580 | 1.00 35.39 | C |
| ATOM | 7075 | CG | GLU C | 58 | -17.785 | 68.508 | 40.291 | 1.00 40.77 | C |
| ATOM | 7076 | CD | GLU C | 58 | -18.147 | 69.042 | 41.689 | 1.00 45.47 | C |
| ATOM | 7077 | OE1 | GLU C | 58 | -18.635 | 70.203 | 41.768 | 1.00 46.59 | O |
| ATOM | 7078 | OE2 | GLU C | 58 | -17.922 | 68.320 | 42.707 | 1.00 48.36 | O |
| ATOM | 7079 | N | GLN C | 59 | -14.595 | 70.906 | 38.277 | 1.00 30.16 | N |
| ATOM | 7080 | CA | GLN C | 59 | -14.013 | 72.130 | 37.740 | 1.00 29.48 | C |
| ATOM | 7081 | C | GLN C | 59 | -13.520 | 71.970 | 36.320 | 1.00 29.72 | C |
| ATOM | 7082 | O | GLN C | 59 | -13.692 | 72.858 | 35.490 | 1.00 29.23 | O |
| ATOM | 7083 | CB | GLN C | 59 | -12.851 | 72.640 | 38.603 | 1.00 29.19 | C |
| ATOM | 7084 | CG | GLN C | 59 | -13.217 | 73.190 | 39.976 | 1.00 29.41 | C |
| ATOM | 7085 | CD | GLN C | 59 | -12.007 | 73.809 | 40.705 | 1.00 30.21 | C |
| ATOM | 7086 | OE1 | GLN C | 59 | -10.851 | 73.560 | 40.335 | 1.00 32.54 | O |
| ATOM | 7087 | NE2 | GLN C | 59 | -12.269 | 74.604 | 41.735 | 1.00 27.37 | N |
| ATOM | 7088 | N | LEU C | 60 | -12.900 | 70.830 | 36.038 | 1.00 29.86 | N |
| ATOM | 7089 | CA | LEU C | 60 | -12.370 | 70.586 | 34.712 | 1.00 29.43 | C |
| ATOM | 7090 | C | LEU C | 60 | -13.486 | 70.583 | 33.652 | 1.00 32.11 | C |
| ATOM | 7091 | O | LEU C | 60 | -13.214 | 70.861 | 32.479 | 1.00 30.43 | O |
| ATOM | 7092 | CB | LEU C | 60 | -11.615 | 69.258 | 34.701 | 1.00 25.97 | C |
| ATOM | 7093 | CG | LEU C | 60 | -10.251 | 69.351 | 35.404 | 1.00 23.65 | C |
| ATOM | 7094 | CD1 | LEU C | 60 | -9.756 | 67.970 | 35.756 | 1.00 22.18 | C |
| ATOM | 7095 | CD2 | LEU C | 60 | -9.278 | 70.063 | 34.531 | 1.00 20.14 | C |
| ATOM | 7096 | N | HIS C | 61 | -14.722 | 70.268 | 34.077 | 1.00 34.17 | N |
| ATOM | 7097 | CA | HIS C | 61 | -15.885 | 70.222 | 33.184 | 1.00 36.23 | C |
| ATOM | 7098 | C | HIS C | 61 | -16.790 | 71.451 | 33.282 | 1.00 37.48 | C |
| ATOM | 7099 | O | HIS C | 61 | -17.588 | 71.695 | 32.385 | 1.00 37.25 | O |
| ATOM | 7100 | CB | HIS C | 61 | -16.732 | 68.967 | 33.462 | 1.00 37.93 | C |
| ATOM | 7101 | CG | HIS C | 61 | -16.054 | 67.677 | 33.088 | 1.00 40.22 | C |
| ATOM | 7102 | ND1 | HIS C | 61 | -16.047 | 67.181 | 31.800 | 1.00 40.96 | N |
| ATOM | 7103 | CD2 | HIS C | 61 | -15.314 | 66.812 | 33.824 | 1.00 40.61 | C |
| ATOM | 7104 | CE1 | HIS C | 61 | -15.331 | 66.070 | 31.761 | 1.00 41.39 | C |
| ATOM | 7105 | NE2 | HIS C | 61 | -14.873 | 65.826 | 32.976 | 1.00 41.46 | N |
| ATOM | 7106 | N | ASP C | 62 | -16.666 | 72.226 | 34.358 | 1.00 38.15 | N |
| ATOM | 7107 | CA | ASP C | 62 | -17.491 | 73.414 | 34.564 | 1.00 38.24 | C |
| ATOM | 7108 | C | ASP C | 62 | -16.839 | 74.742 | 34.203 | 1.00 38.69 | C |
| ATOM | 7109 | O | ASP C | 62 | -17.532 | 75.699 | 33.862 | 1.00 39.07 | O |
| ATOM | 7110 | CB | ASP C | 62 | -17.956 | 73.499 | 36.020 | 1.00 39.13 | C |
| ATOM | 7111 | CG | ASP C | 62 | -18.840 | 72.324 | 36.423 | 1.00 41.75 | C |
| ATOM | 7112 | OD1 | ASP C | 62 | -19.217 | 71.553 | 35.512 | 1.00 44.18 | O |
| ATOM | 7113 | OD2 | ASP C | 62 | -19.165 | 72.168 | 37.633 | 1.00 40.50 | O |

| ATOM | 7114 | N | LEU C | 63 | -15.518 | 74.820 | 34.288 | 1.00 | 37.78 | N |
| ATOM | 7115 | CA | LEU C | 63 | -14.812 | 76.066 | 33.990 | 1.00 | 36.38 | C |
| ATOM | 7116 | C | LEU C | 63 | -14.258 | 76.024 | 32.582 | 1.00 | 37.35 | C |
| ATOM | 7117 | O | LEU C | 63 | -14.062 | 74.939 | 32.019 | 1.00 | 36.67 | O |
| ATOM | 7118 | CB | LEU C | 63 | -13.656 | 76.279 | 34.984 | 1.00 | 36.38 | C |
| ATOM | 7119 | CG | LEU C | 63 | -13.945 | 76.528 | 36.476 | 1.00 | 35.94 | C |
| ATOM | 7120 | CD1 | LEU C | 63 | -12.656 | 76.597 | 37.254 | 1.00 | 34.78 | C |
| ATOM | 7121 | CD2 | LEU C | 63 | -14.700 | 77.834 | 36.652 | 1.00 | 35.57 | C |
| ATOM | 7122 | N | GLU C | 64 | -13.990 | 77.197 | 32.013 | 1.00 | 36.65 | N |
| ATOM | 7123 | CA | GLU C | 64 | -13.447 | 77.255 | 30.667 | 1.00 | 36.56 | C |
| ATOM | 7124 | C | GLU C | 64 | -12.172 | 76.438 | 30.697 | 1.00 | 34.86 | C |
| ATOM | 7125 | O | GLU C | 64 | -11.852 | 75.705 | 29.758 | 1.00 | 34.57 | O |
| ATOM | 7126 | CB | GLU C | 64 | -13.138 | 78.688 | 30.278 | 1.00 | 37.41 | C |
| ATOM | 7127 | CG | GLU C | 64 | -13.244 | 78.898 | 28.798 | 1.00 | 39.28 | C |
| ATOM | 7128 | CD | GLU C | 64 | -13.172 | 80.348 | 28.430 | 1.00 | 40.51 | C |
| ATOM | 7129 | OE1 | GLU C | 64 | -13.852 | 81.157 | 29.097 | 1.00 | 39.98 | O |
| ATOM | 7130 | OE2 | GLU C | 64 | -12.438 | 80.676 | 27.472 | 1.00 | 43.09 | O |
| ATOM | 7131 | N | TRP C | 65 | -11.439 | 76.611 | 31.789 | 1.00 | 33.55 | N |
| ATOM | 7132 | CA | TRP C | 65 | -10.210 | 75.854 | 32.070 | 1.00 | 31.94 | C |
| ATOM | 7133 | C | TRP C | 65 | -9.767 | 76.112 | 33.513 | 1.00 | 31.01 | C |
| ATOM | 7134 | O | TRP C | 65 | -10.173 | 77.101 | 34.145 | 1.00 | 30.58 | O |
| ATOM | 7135 | CB | TRP C | 65 | -9.074 | 76.148 | 31.054 | 1.00 | 30.60 | C |
| ATOM | 7136 | CG | TRP C | 65 | -8.277 | 77.392 | 31.233 | 1.00 | 32.42 | C |
| ATOM | 7137 | CD1 | TRP C | 65 | -7.073 | 77.511 | 31.864 | 1.00 | 32.10 | C |
| ATOM | 7138 | CD2 | TRP C | 65 | -8.573 | 78.689 | 30.693 | 1.00 | 32.83 | C |
| ATOM | 7139 | NE1 | TRP C | 65 | -6.598 | 78.798 | 31.744 | 1.00 | 32.00 | N |
| ATOM | 7140 | CE2 | TRP C | 65 | -7.502 | 79.539 | 31.032 | 1.00 | 32.84 | C |
| ATOM | 7141 | CE3 | TRP C | 65 | -9.642 | 79.214 | 29.956 | 1.00 | 33.51 | C |
| ATOM | 7142 | CZ2 | TRP C | 65 | -7.464 | 80.891 | 30.659 | 1.00 | 34.28 | C |
| ATOM | 7143 | CZ3 | TRP C | 65 | -9.605 | 80.569 | 29.585 | 1.00 | 33.03 | C |
| ATOM | 7144 | CH2 | TRP C | 65 | -8.524 | 81.383 | 29.939 | 1.00 | 32.61 | C |
| ATOM | 7145 | N | VAL C | 66 | -8.988 | 75.177 | 34.052 | 1.00 | 28.64 | N |
| ATOM | 7146 | CA | VAL C | 66 | -8.490 | 75.279 | 35.422 | 1.00 | 27.67 | C |
| ATOM | 7147 | C | VAL C | 66 | -7.010 | 75.659 | 35.351 | 1.00 | 26.33 | C |
| ATOM | 7148 | O | VAL C | 66 | -6.263 | 74.983 | 34.680 | 1.00 | 28.27 | O |
| ATOM | 7149 | CB | VAL C | 66 | -8.607 | 73.904 | 36.133 | 1.00 | 27.34 | C |
| ATOM | 7150 | CG1 | VAL C | 66 | -8.055 | 73.983 | 37.553 | 1.00 | 26.19 | C |
| ATOM | 7151 | CG2 | VAL C | 66 | -10.055 | 73.444 | 36.133 | 1.00 | 26.48 | C |
| ATOM | 7152 | N | ASN C | 67 | -6.589 | 76.766 | 35.964 | 1.00 | 25.82 | N |
| ATOM | 7153 | CA | ASN C | 67 | -5.169 | 77.065 | 35.960 | 1.00 | 24.84 | C |
| ATOM | 7154 | C | ASN C | 67 | -4.596 | 77.108 | 37.371 | 1.00 | 24.74 | C |
| ATOM | 7155 | O | ASN C | 67 | -5.341 | 77.110 | 38.378 | 1.00 | 24.62 | O |
| ATOM | 7156 | CB | ASN C | 67 | -4.792 | 78.332 | 35.181 | 1.00 | 25.91 | C |
| ATOM | 7157 | CG | ASN C | 67 | -5.545 | 79.553 | 35.613 | 1.00 | 28.48 | C |
| ATOM | 7158 | OD1 | ASN C | 67 | -6.389 | 79.501 | 36.516 | 1.00 | 29.81 | O |
| ATOM | 7159 | ND2 | ASN C | 67 | -5.267 | 80.678 | 34.939 | 1.00 | 28.24 | N |
| ATOM | 7160 | N | ALA C | 68 | -3.272 | 77.120 | 37.434 | 1.00 | 23.12 | N |
| ATOM | 7161 | CA | ALA C | 68 | -2.590 | 77.101 | 38.717 | 1.00 | 22.96 | C |
| ATOM | 7162 | C | ALA C | 68 | -1.130 | 77.547 | 38.623 | 1.00 | 21.33 | C |
| ATOM | 7163 | O | ALA C | 68 | -0.573 | 77.735 | 37.547 | 1.00 | 21.52 | O |
| ATOM | 7164 | CB | ALA C | 68 | -2.669 | 75.673 | 39.324 | 1.00 | 23.34 | C |
| ATOM | 7165 | N | LEU C | 69 | -0.539 | 77.727 | 39.794 | 1.00 | 21.71 | N |
| ATOM | 7166 | CA | LEU C | 69 | 0.849 | 78.150 | 39.942 | 1.00 | 21.34 | C |
| ATOM | 7167 | C | LEU C | 69 | 1.523 | 77.172 | 40.919 | 1.00 | 20.59 | C |
| ATOM | 7168 | O | LEU C | 69 | 0.877 | 76.715 | 41.856 | 1.00 | 21.40 | O |
| ATOM | 7169 | CB | LEU C | 69 | 0.918 | 79.545 | 40.574 | 1.00 | 21.99 | C |
| ATOM | 7170 | CG | LEU C | 69 | 0.474 | 80.723 | 39.717 | 1.00 | 23.01 | C |
| ATOM | 7171 | CD1 | LEU C | 69 | 0.866 | 82.001 | 40.453 | 1.00 | 24.17 | C |
| ATOM | 7172 | CD2 | LEU C | 69 | 1.147 | 80.660 | 38.362 | 1.00 | 21.12 | C |
| ATOM | 7173 | N | GLY C | 70 | 2.812 | 76.913 | 40.714 | 1.00 | 20.59 | N |
| ATOM | 7174 | CA | GLY C | 70 | 3.546 | 75.991 | 41.583 | 1.00 | 22.19 | C |
| ATOM | 7175 | C | GLY C | 70 | 3.687 | 76.545 | 42.990 | 1.00 | 21.84 | C |
| ATOM | 7176 | O | GLY C | 70 | 4.085 | 77.695 | 43.147 | 1.00 | 23.11 | O |
| ATOM | 7177 | N | ALA C | 71 | 3.299 | 75.768 | 44.008 | 1.00 | 20.61 | N |
| ATOM | 7178 | CA | ALA C | 71 | 3.407 | 76.204 | 45.398 | 1.00 | 19.17 | C |
| ATOM | 7179 | C | ALA C | 71 | 4.387 | 75.274 | 46.098 | 1.00 | 20.56 | C |
| ATOM | 7180 | O | ALA C | 71 | 4.239 | 74.049 | 45.985 | 1.00 | 19.61 | O |
| ATOM | 7181 | CB | ALA C | 71 | 2.067 | 76.085 | 46.096 | 1.00 | 20.52 | C |
| ATOM | 7182 | N | LEU C | 72 | 5.365 | 75.836 | 46.808 | 1.00 | 19.82 | N |
| ATOM | 7183 | CA | LEU C | 72 | 6.310 | 75.013 | 47.538 | 1.00 | 20.74 | C |
| ATOM | 7184 | C | LEU C | 72 | 6.216 | 75.205 | 49.049 | 1.00 | 19.41 | C |
| ATOM | 7185 | O | LEU C | 72 | 6.920 | 74.502 | 49.789 | 1.00 | 21.75 | O |
| ATOM | 7186 | CB | LEU C | 72 | 7.726 | 75.245 | 47.060 | 1.00 | 21.21 | C |
| ATOM | 7187 | CG | LEU C | 72 | 8.259 | 76.635 | 47.359 | 1.00 | 20.57 | C |
| ATOM | 7188 | CD1 | LEU C | 72 | 9.496 | 76.523 | 48.270 | 1.00 | 23.01 | C |
| ATOM | 7189 | CD2 | LEU C | 72 | 8.594 | 77.301 | 46.064 | 1.00 | 21.03 | C |
| ATOM | 7190 | N | THR C | 73 | 5.396 | 76.169 | 49.526 | 1.00 | 18.89 | N |
| ATOM | 7191 | CA | THR C | 73 | 5.141 | 76.299 | 50.971 | 1.00 | 16.87 | C |
| ATOM | 7192 | C | THR C | 73 | 3.628 | 76.406 | 51.134 | 1.00 | 17.41 | C |
| ATOM | 7193 | O | THR C | 73 | 2.919 | 76.652 | 50.156 | 1.00 | 18.62 | O |

| ATOM | 7194 | CB | THR C | 73 | 5.824 | 77.535 | 51.654 | 1.00 | 17.07 | C |
|------|------|-----|-------|-----|--------|--------|--------|------|-------|---|
| ATOM | 7195 | OG1 | THR C | 73 | 5.044 | 78.728 | 51.431 | 1.00 | 19.13 | O |
| ATOM | 7196 | CG2 | THR C | 73 | 7.236 | 77.705 | 51.114 | 1.00 | 15.99 | C |
| ATOM | 7197 | N | GLY C | 74 | 3.141 | 76.167 | 52.343 | 1.00 | 19.00 | N |
| ATOM | 7198 | CA | GLY C | 74 | 1.715 | 76.230 | 52.575 | 1.00 | 19.55 | C |
| ATOM | 7199 | C | GLY C | 74 | 1.219 | 77.665 | 52.424 | 1.00 | 19.60 | C |
| ATOM | 7200 | O | GLY C | 74 | 0.128 | 77.908 | 51.905 | 1.00 | 18.88 | O |
| ATOM | 7201 | N | ASN C | 75 | 2.015 | 78.613 | 52.888 | 1.00 | 20.08 | N |
| ATOM | 7202 | CA | ASN C | 75 | 1.620 | 80.023 | 52.792 | 1.00 | 19.70 | C |
| ATOM | 7203 | C | ASN C | 75 | 1.415 | 80.420 | 51.304 | 1.00 | 21.35 | C |
| ATOM | 7204 | O | ASN C | 75 | 0.489 | 81.163 | 50.988 | 1.00 | 20.84 | O |
| ATOM | 7205 | CB | ASN C | 75 | 2.682 | 80.909 | 53.440 | 1.00 | 20.24 | C |
| ATOM | 7206 | CG | ASN C | 75 | 2.600 | 80.921 | 54.960 | 1.00 | 19.01 | C |
| ATOM | 7207 | OD1 | ASN C | 75 | 1.922 | 80.076 | 55.608 | 1.00 | 22.62 | O |
| ATOM | 7208 | ND2 | ASN C | 75 | 3.287 | 81.871 | 55.547 | 1.00 | 17.84 | N |
| ATOM | 7209 | N | MET C | 76 | 2.245 | 79.915 | 50.388 | 1.00 | 21.36 | N |
| ATOM | 7210 | CA | MET C | 76 | 2.057 | 80.241 | 48.966 | 1.00 | 22.69 | C |
| ATOM | 7211 | C | MET C | 76 | 0.695 | 79.764 | 48.461 | 1.00 | 24.31 | C |
| ATOM | 7212 | O | MET C | 76 | -0.011 | 80.468 | 47.733 | 1.00 | 24.66 | O |
| ATOM | 7213 | CB | MET C | 76 | 3.128 | 79.601 | 48.085 | 1.00 | 22.06 | C |
| ATOM | 7214 | CG | MET C | 76 | 4.575 | 80.043 | 48.311 | 1.00 | 21.92 | C |
| ATOM | 7215 | SD | MET C | 76 | 5.645 | 79.406 | 46.945 | 1.00 | 25.50 | S |
| ATOM | 7216 | CE | MET C | 76 | 7.232 | 80.161 | 47.316 | 1.00 | 22.92 | C |
| ATOM | 7217 | N | ALA C | 77 | 0.320 | 78.553 | 48.855 | 1.00 | 23.43 | N |
| ATOM | 7218 | CA | ALA C | 77 | -0.953 | 78.004 | 48.442 | 1.00 | 23.59 | C |
| ATOM | 7219 | C | ALA C | 77 | -2.070 | 78.868 | 49.001 | 1.00 | 24.05 | C |
| ATOM | 7220 | O | ALA C | 77 | -3.058 | 79.142 | 48.296 | 1.00 | 24.88 | O |
| ATOM | 7221 | CB | ALA C | 77 | -1.104 | 76.531 | 48.942 | 1.00 | 22.24 | C |
| ATOM | 7222 | N | VAL C | 78 | -1.938 | 79.280 | 50.265 | 1.00 | 21.20 | N |
| ATOM | 7223 | CA | VAL C | 78 | -2.950 | 80.146 | 50.870 | 1.00 | 21.54 | C |
| ATOM | 7224 | C | VAL C | 78 | -3.122 | 81.424 | 50.030 | 1.00 | 21.56 | C |
| ATOM | 7225 | O | VAL C | 78 | -4.245 | 81.798 | 49.682 | 1.00 | 23.03 | O |
| ATOM | 7226 | CB | VAL C | 78 | -2.595 | 80.526 | 52.336 | 1.00 | 20.33 | C |
| ATOM | 7227 | CG1 | VAL C | 78· | -3.596 | 81.599 | 52.882 | 1.00 | 18.67 | C |
| ATOM | 7228 | CG2 | VAL C | 78 | -2.675 | 79.270 | 53.224 | 1.00 | 20.77 | C |
| ATOM | 7229 | N | GLN C | 79 | -2.026 | 82.067 | 49.678 | 1.00 | 21.80 | N |
| ATOM | 7230 | CA | GLN C | 79 | -2.106 | 83.295 | 48.880 | 1.00 | 22.91 | C |
| ATOM | 7231 | C | GLN C | 79 | -2.732 | 83.066 | 47.498 | 1.00 | 24.90 | C |
| ATOM | 7232 | O | GLN C | 79 | -3.538 | 83.888 | 47.006 | 1.00 | 24.22 | O |
| ATOM | 7233 | CB | GLN C | 79 | -0.719 | 83.918 | 48.699 | 1.00 | 23.03 | C |
| ATOM | 7234 | CG | GLN C | 79 | -0.093 | 84.503 | 49.973 | 1.00 | 25.47 | C |
| ATOM | 7235 | CD | GLN C | 79 | -1.040 | 85.395 | 50.756 | 1.00 | 27.69 | C |
| ATOM | 7236 | OE1 | GLN C | 79 | -1.974 | 86.015 | 50.190 | 1.00 | 27.97 | O |
| ATOM | 7237 | NE2 | GLN C | 79 | -0.813 | 85.476 | 52.074 | 1.00 | 27.78 | N |
| ATOM | 7238 | N | GLN C | 80 | -2.362 | 81.960 | 46.861 | 1.00 | 22.44 | N |
| ATOM | 7239 | CA | GLN C | 80 | -2.900 | 81.618 | 45.555 | 1.00 | 23.39 | C |
| ATOM | 7240 | C | GLN C | 80 | -4.412 | 81.528 | 45.659 | 1.00 | 24.47 | C |
| ATOM | 7241 | O | GLN C | 80 | -5.116 | 81.970 | 44.757 | 1.00 | 26.24 | O |
| ATOM | 7242 | CB | GLN C | 80 | -2.289 | 80.274 | 45.078 | 1.00 | 22.49 | C |
| ATOM | 7243 | CG | GLN C | 80 | -0.824 | 80.425 | 44.653 | 1.00 | 21.19 | C |
| ATOM | 7244 | CD | GLN C | 80 | -0.130 | 79.083 | 44.437 | 1.00 | 22.19 | C |
| ATOM | 7245 | OE1 | GLN C | 80 | -0.733 | 78.013 | 44.645 | 1.00 | 20.00 | O |
| ATOM | 7246 | NE2 | GLN C | 80 | 1.132 | 79.129 | 44.034 | 1.00 | 21.27 | N |
| ATOM | 7247 | N | VAL C | 81 | -4.912 | 80.983 | 46.761 | 1.00 | 25.17 | N |
| ATOM | 7248 | CA | VAL C | 81 | -6.342 | 80.835 | 46.937 | 1.00 | 25.63 | C |
| ATOM | 7249 | C | VAL C | 81 | -6.997 | 82.145 | 47.337 | 1.00 | 28.14 | C |
| ATOM | 7250 | O | VAL C | 81 | -8.090 | 82.470 | 46.844 | 1.00 | 29.36 | O |
| ATOM | 7251 | CB | VAL C | 81 | -6.660 | 79.762 | 47.974 | 1.00 | 26.35 | C |
| ATOM | 7252 | CG1 | VAL C | 81 | -8.170 | 79.732 | 48.263 | 1.00 | 26.37 | C |
| ATOM | 7253 | CG2 | VAL C | 81 | -6.198 | 78.382 | 47.431 | 1.00 | 21.19 | C |
| ATOM | 7254 | N | ARG C | 82 | -6.353 | 82.899 | 48.223 | 1.00 | 28.54 | N |
| ATOM | 7255 | CA | ARG C | 82 | -6.932 | 84.191 | 48.624 | 1.00 | 30.95 | C |
| ATOM | 7256 | C | ARG C | 82 | -7.024 | 85.070 | 47.373 | 1.00 | 31.26 | C |
| ATOM | 7257 | O | ARG C | 82 | -7.980 | 85.841 | 47.207 | 1.00 | 33.51 | O |
| ATOM | 7258 | CB | ARG C | 82 | -6.065 | 84.884 | 49.693 | 1.00 | 31.80 | C |
| ATOM | 7259 | CG | ARG C | 82 | -6.456 | 86.352 | 50.042 | 1.00 | 31.97 | C |
| ATOM | 7260 | CD | ARG C | 82 | -7.735 | 86.485 | 50.877 | 1.00 | 32.18 | C |
| ATOM | 7261 | NE | ARG C | 82 | -7.535 | 86.065 | 52.261 | 1.00 | 33.37 | N |
| ATOM | 7262 | CZ | ARG C | 82 | -8.496 | 85.989 | 53.184 | 1.00 | 34.67 | C |
| ATOM | 7263 | NH1 | ARG C | 82 | -9.753 | 86.311 | 52.898 | 1.00 | 33.74 | N |
| ATOM | 7264 | NH2 | ARG C | 82 | -8.202 | 85.560 | 54.411 | 1.00 | 35.31 | N |
| ATOM | 7265 | N | ALA C | 83 | -6.045 | 84.937 | 46.482 | 1.00 | 30.62 | N |
| ATOM | 7266 | CA | ALA C | 83 | -6.018 | 85.741 | 45.267 | 1.00 | 30.16 | C |
| ATOM | 7267 | C | ALA C | 83 | -6.974 | 85.298 | 44.155 | 1.00 | 29.76 | C |
| ATOM | 7268 | O | ALA C | 83 | -6.977 | 85.886 | 43.082 | 1.00 | 31.86 | O |
| ATOM | 7269 | CB | ALA C | 83 | -4.598 | 85.817 | 44.740 | 1.00 | 29.51 | C |
| ATOM | 7270 | N | GLY C | 84 | -7.785 | 84.266 | 44.392 | 1.00 | 29.88 | N |
| ATOM | 7271 | CA | GLY C | 84 | -8.731 | 83.841 | 43.373 | 1.00 | 29.04 | C |
| ATOM | 7272 | C | GLY C | 84 | -8.542 | 82.535 | 42.607 | 1.00 | 29.26 | C |
| ATOM | 7273 | O | GLY C | 84 | -9.439 | 82.130 | 41.865 | 1.00 | 29.92 | O |

| ATOM | 7274 | N   | LEU | C | 85 | -7.407  | 81.857 | 42.774 | 1.00 | 27.97 | N |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 7275 | CA  | LEU | C | 85 | -7.175  | 80.611 | 42.053 | 1.00 | 25.53 | C |
| ATOM | 7276 | C   | LEU | C | 85 | -7.979  | 79.461 | 42.630 | 1.00 | 25.82 | C |
| ATOM | 7277 | O   | LEU | C | 85 | -8.321  | 79.424 | 43.813 | 1.00 | 25.07 | O |
| ATOM | 7278 | CB  | LEU | C | 85 | -5.671  | 80.308 | 42.004 | 1.00 | 24.54 | C |
| ATOM | 7279 | CG  | LEU | C | 85 | -4.871  | 81.479 | 41.397 | 1.00 | 23.70 | C |
| ATOM | 7280 | CD1 | LEU | C | 85 | -3.383  | 81.155 | 41.182 | 1.00 | 23.59 | C |
| ATOM | 7281 | CD2 | LEU | C | 85 | -5.522  | 81.820 | 40.059 | 1.00 | 25.79 | C |
| ATOM | 7282 | N   | LYS | C | 86 | -8.283  | 78.497 | 41.784 | 1.00 | 26.10 | N |
| ATOM | 7283 | CA  | LYS | C | 86 | -9.114  | 77.407 | 42.235 | 1.00 | 26.46 | C |
| ATOM | 7284 | C   | LYS | C | 86 | -8.433  | 76.049 | 42.244 | 1.00 | 25.88 | C |
| ATOM | 7285 | O   | LYS | C | 86 | -9.090  | 75.053 | 42.513 | 1.00 | 25.84 | O |
| ATOM | 7286 | CB  | LYS | C | 86 | -10.380 | 77.366 | 41.381 | 1.00 | 28.67 | C |
| ATOM | 7287 | CG  | LYS | C | 86 | -11.301 | 78.559 | 41.656 | 1.00 | 31.80 | C |
| ATOM | 7288 | CD  | LYS | C | 86 | -12.472 | 78.574 | 40.693 | 1.00 | 33.77 | C |
| ATOM | 7289 | CE  | LYS | C | 86 | -13.320 | 79.845 | 40.826 | 1.00 | 34.84 | C |
| ATOM | 7290 | NZ  | LYS | C | 86 | -14.195 | 79.831 | 42.048 | 1.00 | 38.27 | N |
| ATOM | 7291 | N   | ALA | C | 87 | -7.143  | 76.025 | 41.910 | 1.00 | 26.06 | N |
| ATOM | 7292 | CA  | ALA | C | 87 | -6.349  | 74.784 | 41.933 | 1.00 | 25.71 | C |
| ATOM | 7293 | C   | ALA | C | 87 | -4.914  | 75.095 | 42.326 | 1.00 | 24.74 | C |
| ATOM | 7294 | O   | ALA | C | 87 | -4.452  | 76.213 | 42.143 | 1.00 | 25.19 | O |
| ATOM | 7295 | CB  | ALA | C | 87 | -6.383  | 74.102 | 40.576 | 1.00 | 26.36 | C |
| ATOM | 7296 | N   | ILE | C | 88 | -4.207  | 74.116 | 42.897 | 1.00 | 22.27 | N |
| ATOM | 7297 | CA  | ILE | C | 88 | -2.814  | 74.324 | 43.260 | 1.00 | 22.12 | C |
| ATOM | 7298 | C   | ILE | C | 88 | -1.933  | 73.299 | 42.536 | 1.00 | 22.48 | C |
| ATOM | 7299 | O   | ILE | C | 88 | -2.304  | 72.123 | 42.417 | 1.00 | 23.20 | O |
| ATOM | 7300 | CB  | ILE | C | 88 | -2.644  | 74.211 | 44.811 | 1.00 | 23.45 | C |
| ATOM | 7301 | CG1 | ILE | C | 88 | -3.395  | 75.377 | 45.467 | 1.00 | 23.57 | C |
| ATOM | 7302 | CG2 | ILE | C | 88 | -1.173  | 74.294 | 45.208 | 1.00 | 21.92 | C |
| ATOM | 7303 | CD1 | ILE | C | 88 | -3.671  | 75.178 | 46.872 | 1.00 | 26.32 | C |
| ATOM | 7304 | N   | TYR | C | 89 | -0.796  | 73.756 | 42.021 | 1.00 | 21.24 | N |
| ATOM | 7305 | CA  | TYR | C | 89 | 0.169   | 72.873 | 41.372 | 1.00 | 20.85 | C |
| ATOM | 7306 | C   | TYR | C | 89 | 1.371   | 72.653 | 42.316 | 1.00 | 20.06 | C |
| ATOM | 7307 | O   | TYR | C | 89 | 1.948   | 73.626 | 42.819 | 1.00 | 21.08 | O |
| ATOM | 7308 | CB  | TYR | C | 89 | 0.685   | 73.476 | 40.052 | 1.00 | 19.01 | C |
| ATOM | 7309 | CG  | TYR | C | 89 | 1.635   | 72.547 | 39.362 | 1.00 | 19.46 | C |
| ATOM | 7310 | CD1 | TYR | C | 89 | 1.193   | 71.289 | 38.893 | 1.00 | 18.54 | C |
| ATOM | 7311 | CD2 | TYR | C | 89 | 3.007   | 72.851 | 39.273 | 1.00 | 18.76 | C |
| ATOM | 7312 | CE1 | TYR | C | 89 | 2.117   | 70.374 | 38.361 | 1.00 | 19.45 | C |
| ATOM | 7313 | CE2 | TYR | C | 89 | 3.904   | 71.946 | 38.758 | 1.00 | 17.55 | C |
| ATOM | 7314 | CZ  | TYR | C | 89 | 3.456   | 70.716 | 38.305 | 1.00 | 18.93 | C |
| ATOM | 7315 | OH  | TYR | C | 89 | 4.368   | 69.820 | 37.786 | 1.00 | 18.98 | O |
| ATOM | 7316 | N   | LEU | C | 90 | 1.761   | 71.385 | 42.526 | 1.00 | 19.09 | N |
| ATOM | 7317 | CA  | LEU | C | 90 | 2.884   | 71.041 | 43.406 | 1.00 | 18.26 | C |
| ATOM | 7318 | C   | LEU | C | 90 | 3.965   | 70.416 | 42.540 | 1.00 | 19.81 | C |
| ATOM | 7319 | O   | LEU | C | 90 | 3.904   | 69.252 | 42.125 | 1.00 | 19.75 | O |
| ATOM | 7320 | CB  | LEU | C | 90 | 2.388   | 70.122 | 44.521 | 1.00 | 19.22 | C |
| ATOM | 7321 | CG  | LEU | C | 90 | 3.219   | 69.442 | 45.633 | 1.00 | 21.51 | C |
| ATOM | 7322 | CD1 | LEU | C | 90 | 4.672   | 69.803 | 45.608 | 1.00 | 17.97 | C |
| ATOM | 7323 | CD2 | LEU | C | 90 | 2.518   | 69.694 | 46.941 | 1.00 | 20.26 | C |
| ATOM | 7324 | N   | SER | C | 91 | 4.946   | 71.260 | 42.244 | 1.00 | 16.82 | N |
| ATOM | 7325 | CA  | SER | C | 91 | 6.098   | 70.979 | 41.406 | 1.00 | 17.05 | C |
| ATOM | 7326 | C   | SER | C | 91 | 7.183   | 70.146 | 42.078 | 1.00 | 16.40 | C |
| ATOM | 7327 | O   | SER | C | 91 | 7.643   | 70.513 | 43.159 | 1.00 | 16.35 | O |
| ATOM | 7328 | CB  | SER | C | 91 | 6.748   | 72.314 | 41.014 | 1.00 | 17.59 | C |
| ATOM | 7329 | OG  | SER | C | 91 | 7.945   | 72.078 | 40.311 | 1.00 | 18.26 | O |
| ATOM | 7330 | N   | GLY | C | 92 | 7.628   | 69.087 | 41.393 | 1.00 | 16.03 | N |
| ATOM | 7331 | CA  | GLY | C | 92 | 8.702   | 68.245 | 41.911 | 1.00 | 15.84 | C |
| ATOM | 7332 | C   | GLY | C | 92 | 10.015  | 69.016 | 41.786 | 1.00 | 17.24 | C |
| ATOM | 7333 | O   | GLY | C | 92 | 10.914  | 68.860 | 42.610 | 1.00 | 16.56 | O |
| ATOM | 7334 | N   | TRP | C | 93 | 10.102  | 69.870 | 40.760 | 1.00 | 16.14 | N |
| ATOM | 7335 | CA  | TRP | C | 93 | 11.292  | 70.675 | 40.514 | 1.00 | 18.01 | C |
| ATOM | 7336 | C   | TRP | C | 93 | 11.466  | 71.625 | 41.682 | 1.00 | 15.16 | C |
| ATOM | 7337 | O   | TRP | C | 93 | 12.549  | 71.743 | 42.190 | 1.00 | 16.91 | O |
| ATOM | 7338 | CB  | TRP | C | 93 | 11.161  | 71.494 | 39.217 | 1.00 | 18.07 | C |
| ATOM | 7339 | CG  | TRP | C | 93 | 12.423  | 72.286 | 38.818 | 1.00 | 19.66 | C |
| ATOM | 7340 | CD1 | TRP | C | 93 | 13.247  | 72.012 | 37.771 | 1.00 | 20.46 | C |
| ATOM | 7341 | CD2 | TRP | C | 93 | 12.983  | 73.458 | 39.467 | 1.00 | 18.33 | C |
| ATOM | 7342 | NE1 | TRP | C | 93 | 14.289  | 72.920 | 37.722 | 1.00 | 21.08 | N |
| ATOM | 7343 | CE2 | TRP | C | 93 | 14.154  | 73.816 | 38.745 | 1.00 | 20.09 | C |
| ATOM | 7344 | CE3 | TRP | C | 93 | 12.613  | 74.232 | 40.575 | 1.00 | 16.46 | C |
| ATOM | 7345 | CZ2 | TRP | C | 93 | 14.969  | 74.928 | 39.105 | 1.00 | 19.55 | C |
| ATOM | 7346 | CZ3 | TRP | C | 93 | 13.413  | 75.336 | 40.931 | 1.00 | 19.10 | C |
| ATOM | 7347 | CH2 | TRP | C | 93 | 14.578  | 75.662 | 40.192 | 1.00 | 16.38 | C |
| ATOM | 7348 | N   | GLN | C | 94 | 10.407  | 72.282 | 42.140 | 1.00 | 16.41 | N |
| ATOM | 7349 | CA  | GLN | C | 94 | 10.560  | 73.206 | 43.286 | 1.00 | 16.12 | C |
| ATOM | 7350 | C   | GLN | C | 94 | 10.922  | 72.483 | 44.615 | 1.00 | 16.51 | C |
| ATOM | 7351 | O   | GLN | C | 94 | 11.642  | 73.019 | 45.467 | 1.00 | 14.18 | O |
| ATOM | 7352 | CB  | GLN | C | 94 | 9.274   | 74.006 | 43.461 | 1.00 | 18.30 | C |
| ATOM | 7353 | CG  | GLN | C | 94 | 8.974   | 74.885 | 42.266 | 1.00 | 18.17 | C |

| ATOM | 7354 | CD | GLN | C | 94 | 7.810 | 75.799 | 42.545 | 1.00 | 18.31 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 7355 | OE1 | GLN | C | 94 | 6.845 | 75.427 | 43.252 | 1.00 | 18.48 | O |
| ATOM | 7356 | NE2 | GLN | C | 94 | 7.873 | 76.995 | 41.994 | 1.00 | 20.61 | N |
| ATOM | 7357 | N | VAL | C | 95 | 10.388 | 71.277 | 44.784 | 1.00 | 15.39 | N |
| ATOM | 7358 | CA | VAL | C | 95 | 10.665 | 70.438 | 45.939 | 1.00 | 14.32 | C |
| ATOM | 7359 | C | VAL | C | 95 | 12.147 | 70.069 | 45.882 | 1.00 | 13.20 | C |
| ATOM | 7360 | O | VAL | C | 95 | 12.824 | 70.136 | 46.901 | 1.00 | 12.40 | O |
| ATOM | 7361 | CB | VAL | C | 95 | 9.748 | 69.172 | 45.888 | 1.00 | 14.88 | C |
| ATOM | 7362 | CG1 | VAL | C | 95 | 10.258 | 68.055 | 46.757 | 1.00 | 15.80 | C |
| ATOM | 7363 | CG2 | VAL | C | 95 | 8.338 | 69.588 | 46.382 | 1.00 | 12.93 | C |
| ATOM | 7364 | N | ALA | C | 96 | 12.649 | 69.688 | 44.710 | 1.00 | 12.53 | N |
| ATOM | 7365 | CA | ALA | C | 96 | 14.071 | 69.315 | 44.599 | 1.00 | 13.47 | C |
| ATOM | 7366 | C | ALA | C | 96 | 14.941 | 70.522 | 44.967 | 1.00 | 15.33 | C |
| ATOM | 7367 | O | ALA | C | 96 | 15.960 | 70.414 | 45.651 | 1.00 | 16.39 | O |
| ATOM | 7368 | CB | ALA | C | 96 | 14.410 | 68.912 | 43.184 | 1.00 | 14.25 | C |
| ATOM | 7369 | N | GLY | C | 97 | 14.527 | 71.676 | 44.470 | 1.00 | 16.26 | N |
| ATOM | 7370 | CA | GLY | C | 97 | 15.303 | 72.869 | 44.720 | 1.00 | 17.52 | C |
| ATOM | 7371 | C | GLY | C | 97 | 15.197 | 73.528 | 46.079 | 1.00 | 18.59 | C |
| ATOM | 7372 | O | GLY | C | 97 | 16.182 | 74.120 | 46.536 | 1.00 | 18.67 | O |
| ATOM | 7373 | N | ASP | C | 98 | 14.065 | 73.425 | 46.770 | 1.00 | 18.07 | N |
| ATOM | 7374 | CA | ASP | C | 98 | 13.984 | 74.172 | 48.021 | 1.00 | 17.16 | C |
| ATOM | 7375 | C | ASP | C | 98 | 13.013 | 73.627 | 49.066 | 1.00 | 17.09 | C |
| ATOM | 7376 | O | ASP | C | 98 | 12.735 | 74.308 | 50.065 | 1.00 | 16.77 | O |
| ATOM | 7377 | CB | ASP | C | 98 | 13.602 | 75.639 | 47.643 | 1.00 | 17.76 | C |
| ATOM | 7378 | CG | ASP | C | 98 | 13.943 | 76.688 | 48.718 | 1.00 | 19.62 | C |
| ATOM | 7379 | OD1 | ASP | C | 98 | 14.911 | 76.498 | 49.504 | 1.00 | 21.08 | O |
| ATOM | 7380 | OD2 | ASP | C | 98 | 13.220 | 77.736 | 48.736 | 1.00 | 19.61 | O |
| ATOM | 7381 | N | ALA | C | 99 | 12.477 | 72.419 | 48.848 | 1.00 | 15.09 | N |
| ATOM | 7382 | CA | ALA | C | 99 | 11.538 | 71.863 | 49.827 | 1.00 | 15.13 | C |
| ATOM | 7383 | C | ALA | C | 99 | 11.479 | 70.315 | 49.887 | 1.00 | 16.63 | C |
| ATOM | 7384 | O | ALA | C | 99 | 10.395 | 69.704 | 49.833 | 1.00 | 18.61 | O |
| ATOM | 7385 | CB | ALA | C | 99 | 10.125 | 72.447 | 49.581 | 1.00 | 15.92 | C |
| ATOM | 7386 | N | ASN | C | 100 | 12.628 | 69.675 | 49.995 | 1.00 | 15.02 | N |
| ATOM | 7387 | CA | ASN | C | 100 | 12.587 | 68.197 | 50.064 | 1.00 | 14.32 | C |
| ATOM | 7388 | C | ASN | C | 100 | 13.166 | 67.681 | 51.372 | 1.00 | 16.25 | C |
| ATOM | 7389 | O | ASN | C | 100 | 13.860 | 68.418 | 52.097 | 1.00 | 14.77 | O |
| ATOM | 7390 | CB | ASN | C | 100 | 13.246 | 67.561 | 48.836 | 1.00 | 12.39 | C |
| ATOM | 7391 | CG | ASN | C | 100 | 14.742 | 67.747 | 48.811 | 1.00 | 16.73 | C |
| ATOM | 7392 | OD1 | ASN | C | 100 | 15.256 | 68.674 | 48.167 | 1.00 | 18.66 | O |
| ATOM | 7393 | ND2 | ASN | C | 100 | 15.448 | 66.877 | 49.484 | 1.00 | 9.13 | N |
| ATOM | 7394 | N | LEU | C | 101 | 12.796 | 66.438 | 51.716 | 1.00 | 15.27 | N |
| ATOM | 7395 | CA | LEU | C | 101 | 13.189 | 65.798 | 52.986 | 1.00 | 14.99 | C |
| ATOM | 7396 | C | LEU | C | 101 | 14.696 | 65.541 | 53.252 | 1.00 | 13.65 | C |
| ATOM | 7397 | O | LEU | C | 101 | 15.084 | 65.215 | 54.381 | 1.00 | 11.64 | O |
| ATOM | 7398 | CB | LEU | C | 101 | 12.401 | 64.474 | 53.125 | 1.00 | 17.22 | C |
| ATOM | 7399 | CG | LEU | C | 101 | 11.057 | 64.420 | 53.878 | 1.00 | 21.71 | C |
| ATOM | 7400 | CD1 | LEU | C | 101 | 10.589 | 65.781 | 54.144 | 1.00 | 15.35 | C |
| ATOM | 7401 | CD2 | LEU | C | 101 | 9.984 | 63.563 | 53.170 | 1.00 | 14.07 | C |
| ATOM | 7402 | N | SER | C | 102 | 15.538 | 65.643 | 52.228 | 1.00 | 14.35 | N |
| ATOM | 7403 | CA | SER | C | 102 | 16.966 | 65.446 | 52.462 | 1.00 | 15.40 | C |
| ATOM | 7404 | C | SER | C | 102 | 17.587 | 66.727 | 53.038 | 1.00 | 14.83 | C |
| ATOM | 7405 | O | SER | C | 102 | 18.687 | 66.685 | 53.608 | 1.00 | 15.69 | O |
| ATOM | 7406 | CB | SER | C | 102 | 17.713 | 65.129 | 51.167 | 1.00 | 18.31 | C |
| ATOM | 7407 | OG | SER | C | 102 | 17.828 | 66.340 | 50.424 | 1.00 | 17.48 | O |
| ATOM | 7408 | N | GLY | C | 103 | 16.887 | 67.846 | 52.901 | 1.00 | 16.42 | N |
| ATOM | 7409 | CA | GLY | C | 103 | 17.408 | 69.142 | 53.355 | 1.00 | 16.69 | C |
| ATOM | 7410 | C | GLY | C | 103 | 18.339 | 69.796 | 52.321 | 1.00 | 17.87 | C |
| ATOM | 7411 | O | GLY | C | 103 | 18.793 | 70.925 | 52.497 | 1.00 | 18.31 | O |
| ATOM | 7412 | N | HIS | C | 104 | 18.607 | 69.091 | 51.240 | 1.00 | 17.06 | N |
| ATOM | 7413 | CA | HIS | C | 104 | 19.492 | 69.583 | 50.183 | 1.00 | 16.83 | C |
| ATOM | 7414 | C | HIS | C | 104 | 18.838 | 70.270 | 48.980 | 1.00 | 16.59 | C |
| ATOM | 7415 | O | HIS | C | 104 | 17.638 | 70.123 | 48.687 | 1.00 | 18.00 | O |
| ATOM | 7416 | CB | HIS | C | 104 | 20.384 | 68.429 | 49.705 | 1.00 | 18.16 | C |
| ATOM | 7417 | CG | HIS | C | 104 | 21.526 | 68.133 | 50.627 | 1.00 | 19.96 | C |
| ATOM | 7418 | ND1 | HIS | C | 104 | 21.678 | 66.930 | 51.285 | 1.00 | 19.31 | N |
| ATOM | 7419 | CD2 | HIS | C | 104 | 22.556 | 68.917 | 51.028 | 1.00 | 17.19 | C |
| ATOM | 7420 | CE1 | HIS | C | 104 | 22.752 | 66.988 | 52.056 | 1.00 | 19.15 | C |
| ATOM | 7421 | NE2 | HIS | C | 104 | 23.298 | 68.186 | 51.919 | 1.00 | 22.47 | N |
| ATOM | 7422 | N | THR | C | 105 | 19.639 | 71.111 | 48.332 | 1.00 | 18.16 | N |
| ATOM | 7423 | CA | THR | C | 105 | 19.245 | 71.784 | 47.109 | 1.00 | 17.23 | C |
| ATOM | 7424 | C | THR | C | 105 | 19.635 | 70.851 | 45.960 | 1.00 | 16.91 | C |
| ATOM | 7425 | O | THR | C | 105 | 20.801 | 70.484 | 45.845 | 1.00 | 15.97 | O |
| ATOM | 7426 | CB | THR | C | 105 | 20.039 | 73.107 | 46.916 | 1.00 | 17.14 | C |
| ATOM | 7427 | OG1 | THR | C | 105 | 19.724 | 74.017 | 47.978 | 1.00 | 18.30 | O |
| ATOM | 7428 | CG2 | THR | C | 105 | 19.707 | 73.725 | 45.534 | 1.00 | 19.24 | C |
| ATOM | 7429 | N | TYR | C | 106 | 18.674 | 70.476 | 45.104 | 1.00 | 15.31 | N |
| ATOM | 7430 | CA | TYR | C | 106 | 18.970 | 69.598 | 43.980 | 1.00 | 16.76 | C |
| ATOM | 7431 | C | TYR | C | 106 | 18.393 | 70.043 | 42.662 | 1.00 | 14.31 | C |
| ATOM | 7432 | O | TYR | C | 106 | 17.389 | 70.763 | 42.617 | 1.00 | 16.31 | O |
| ATOM | 7433 | CB | TYR | C | 106 | 18.361 | 68.186 | 44.170 | 1.00 | 14.28 | C |

| ATOM | 7434 | CG | TYR C 106 | 18.892 | 67.378 | 45.315 | 1.00 16.64 | C |
|------|------|------|-----------|--------|--------|--------|-----------|---|
| ATOM | 7435 | CD1 | TYR C 106 | 20.269 | 67.066 | 45.406 | 1.00 15.59 | C |
| ATOM | 7436 | CD2 | TYR C 106 | 18.027 | 66.835 | 46.259 | 1.00 14.17 | C |
| ATOM | 7437 | CE1 | TYR C 106 | 20.754 | 66.218 | 46.387 | 1.00 16.42 | C |
| ATOM | 7438 | CE2 | TYR C 106 | 18.520 | 65.962 | 47.279 | 1.00 15.28 | C |
| ATOM | 7439 | CZ | TYR C 106 | 19.894 | 65.660 | 47.317 | 1.00 15.08 | C |
| ATOM | 7440 | OH | TYR C 106 | 20.419 | 64.779 | 48.262 | 1.00 17.10 | O |
| ATOM | 7441 | N | PRO C 107 | 19.019 | 69.601 | 41.565 | 1.00 16.73 | N |
| ATOM | 7442 | CA | PRO C 107 | 18.530 | 69.910 | 40.217 | 1.00 16.50 | C |
| ATOM | 7443 | C | PRO C 107 | 17.379 | 68.856 | 40.071 | 1.00 19.15 | C |
| ATOM | 7444 | O | PRO C 107 | 17.273 | 67.940 | 40.891 | 1.00 17.74 | O |
| ATOM | 7445 | CB | PRO C 107 | 19.731 | 69.599 | 39.327 | 1.00 17.35 | C |
| ATOM | 7446 | CG | PRO C 107 | 20.479 | 68.565 | 40.055 | 1.00 18.01 | C |
| ATOM | 7447 | CD | PRO C 107 | 20.377 | 69.036 | 41.510 | 1.00 13.32 | C |
| ATOM | 7448 | N | ASP C 108 | 16.532 | 69.014 | 39.061 | 1.00 19.68 | N |
| ATOM | 7449 | CA | ASP C 108 | 15.363 | 68.153 | 38.842 | 1.00 19.87 | C |
| ATOM | 7450 | C | ASP C 108 | 15.717 | 66.789 | 38.241 | 1.00 17.25 | C |
| ATOM | 7451 | O | ASP C 108 | 15.518 | 66.567 | 37.057 | 1.00 21.07 | O |
| ATOM | 7452 | CB | ASP C 108 | 14.435 | 68.920 | 37.925 | 1.00 19.93 | C |
| ATOM | 7453 | CG | ASP C 108 | 13.035 | 68.403 | 37.933 | 1.00 22.32 | C |
| ATOM | 7454 | OD1 | ASP C 108 | 12.676 | 67.673 | 38.883 | 1.00 22.71 | O |
| ATOM | 7455 | OD2 | ASP C 108 | 12.297 | 68.768 | 36.991 | 1.00 19.48 | O |
| ATOM | 7456 | N | GLN C 109 | 16.217 | 65.874 | 39.062 | 1.00 15.78 | N |
| ATOM | 7457 | CA | GLN C 109 | 16.660 | 64.563 | 38.579 | 1.00 15.80 | C |
| ATOM | 7458 | C | GLN C 109 | 16.249 | 63.423 | 39.523 | 1.00 14.02 | C |
| ATOM | 7459 | O | GLN C 109 | 16.975 | 62.466 | 39.657 | 1.00 15.54 | O |
| ATOM | 7460 | CB | GLN C 109 | 18.191 | 64.560 | 38.418 | 1.00 16.94 | C |
| ATOM | 7461 | CG | GLN C 109 | 18.664 | 65.657 | 37.477 | 1.00 21.36 | C |
| ATOM | 7462 | CD | GLN C 109 | 20.147 | 65.613 | 37.146 | 1.00 22.28 | C |
| ATOM | 7463 | OE1 | GLN C 109 | 20.677 | 64.610 | 36.649 | 1.00 21.14 | O |
| ATOM | 7464 | NE2 | GLN C 109 | 20.821 | 66.734 | 37.404 | 1.00 21.29 | N |
| ATOM | 7465 | N | SER C 110 | 15.086 | 63.543 | 40.158 | 1.00 15.25 | N |
| ATOM | 7466 | CA | SER C 110 | 14.623 | 62.520 | 41.096 | 1.00 15.29 | C |
| ATOM | 7467 | C | SER C 110 | 15.693 | 62.114 | 42.100 | 1.00 15.82 | C |
| ATOM | 7468 | O | SER C 110 | 15.916 | 60.930 | 42.339 | 1.00 14.08 | O |
| ATOM | 7469 | CB | SER C 110 | 14.141 | 61.296 | 40.334 | 1.00 15.95 | C |
| ATOM | 7470 | OG | SER C 110 | 12.894 | 61.615 | 39.716 | 1.00 18.90 | O |
| ATOM | 7471 | N | LEU C 111 | 16.348 | 63.109 | 42.703 | 1.00 15.30 | N |
| ATOM | 7472 | CA | LEU C 111 | 17.412 | 62.852 | 43.685 | 1.00 14.53 | C |
| ATOM | 7473 | C | LEU C 111 | 16.899 | 62.854 | 45.141 | 1.00 13.82 | C |
| ATOM | 7474 | O | LEU C 111 | 17.491 | 62.249 | 45.991 | 1.00 15.42 | O |
| ATOM | 7475 | CB | LEU C 111 | 18.510 | 63.941 | 43.542 | 1.00 15.42 | C |
| ATOM | 7476 | CG | LEU C 111 | 19.402 | 63.800 | 42.304 | 1.00 17.95 | C |
| ATOM | 7477 | CD1 | LEU C 111 | 20.309 | 65.035 | 42.130 | 1.00 15.44 | C |
| ATOM | 7478 | CD2 | LEU C 111 | 20.270 | 62.570 | 42.476 | 1.00 18.29 | C |
| ATOM | 7479 | N | TYR C 112 | 15.791 | 63.523 | 45.413 | 1.00 13.14 | N |
| ATOM | 7480 | CA | TYR C 112 | 15.292 | 63.651 | 46.772 | 1.00 11.13 | C |
| ATOM | 7481 | C | TYR C 112 | 14.498 | 62.416 | 47.231 | 1.00 10.09 | C |
| ATOM | 7482 | O | TYR C 112 | 14.128 | 61.610 | 46.419 | 1.00 12.41 | O |
| ATOM | 7483 | CB | TYR C 112 | 14.464 | 64.941 | 46.860 | 1.00 13.15 | C |
| ATOM | 7484 | CG | TYR C 112 | 13.264 | 64.981 | 45.948 | 1.00 14.00 | C |
| ATOM | 7485 | CD1 | TYR C 112 | 12.106 | 64.259 | 46.271 | 1.00 13.91 | C |
| ATOM | 7486 | CD2 | TYR C 112 | 13.247 | 65.788 | 44.788 | 1.00 15.03 | C |
| ATOM | 7487 | CE1 | TYR C 112 | 10.983 | 64.345 | 45.503 | 1.00 13.19 | C |
| ATOM | 7488 | CE2 | TYR C 112 | 12.124 | 65.869 | 43.985 | 1.00 14.99 | C |
| ATOM | 7489 | CZ | TYR C 112 | 10.971 | 65.134 | 44.354 | 1.00 16.04 | C |
| ATOM | 7490 | OH | TYR C 112 | 9.844 | 65.166 | 43.545 | 1.00 15.22 | O |
| ATOM | 7491 | N | PRO C 113 | 14.304 | 62.247 | 48.538 | 1.00 10.96 | N |
| ATOM | 7492 | CA | PRO C 113 | 13.557 | 61.088 | 49.064 | 1.00 10.95 | C |
| ATOM | 7493 | C | PRO C 113 | 12.144 | 61.084 | 48.497 | 1.00 10.92 | C |
| ATOM | 7494 | O | PRO C 113 | 11.457 | 62.094 | 48.545 | 1.00 10.74 | O |
| ATOM | 7495 | CB | PRO C 113 | 13.578 | 61.320 | 50.567 | 1.00 11.84 | C |
| ATOM | 7496 | CG | PRO C 113 | 14.938 | 62.101 | 50.753 | 1.00 11.66 | C |
| ATOM | 7497 | CD | PRO C 113 | 14.855 | 63.066 | 49.632 | 1.00 10.94 | C |
| ATOM | 7498 | N | ALA C 114 | 11.696 | 59.915 | 48.048 | 1.00 11.12 | N |
| ATOM | 7499 | CA | ALA C 114 | 10.390 | 59.781 | 47.421 | 1.00 11.60 | C |
| ATOM | 7500 | C | ALA C 114 | 9.160 | 60.179 | 48.194 | 1.00 13.22 | C |
| ATOM | 7501 | O | ALA C 114 | 8.106 | 60.198 | 47.572 | 1.00 11.00 | O |
| ATOM | 7502 | CB | ALA C 114 | 10.172 | 58.349 | 46.905 | 1.00 11.74 | C |
| ATOM | 7503 | N | ASN C 115 | 9.247 | 60.420 | 49.501 | 1.00 11.28 | N |
| ATOM | 7504 | CA | ASN C 115 | 8.050 | 60.841 | 50.244 | 1.00 12.73 | C |
| ATOM | 7505 | C | ASN C 115 | 8.040 | 62.375 | 50.400 | 1.00 12.43 | C |
| ATOM | 7506 | O | ASN C 115 | 7.236 | 62.934 | 51.154 | 1.00 12.31 | O |
| ATOM | 7507 | CB | ASN C 115 | 7.922 | 60.133 | 51.617 | 1.00 12.38 | C |
| ATOM | 7508 | CG | ASN C 115 | 9.095 | 60.404 | 52.555 | 1.00 14.61 | C |
| ATOM | 7509 | OD1 | ASN C 115 | 10.222 | 60.576 | 52.116 | 1.00 13.12 | O |
| ATOM | 7510 | ND2 | ASN C 115 | 8.836 | 60.357 | 53.855 | 1.00 15.54 | N |
| ATOM | 7511 | N | SER C 116 | 8.886 | 63.050 | 49.622 | 1.00 11.04 | N |
| ATOM | 7512 | CA | SER C 116 | 8.962 | 64.513 | 49.744 | 1.00 11.97 | C |
| ATOM | 7513 | C | SER C 116 | 7.742 | 65.257 | 49.242 | 1.00 12.81 | C |

| ATOM | 7514 | O   | SER C 116 | 7.232 | 66.164 | 49.954 | 1.00 | 12.74 | O |
| ATOM | 7515 | CB  | SER C 116 | 10.238 | 65.073 | 49.056 | 1.00 | 12.99 | C |
| ATOM | 7516 | OG  | SER C 116 | 11.416 | 64.610 | 49.735 | 1.00 | 13.11 | O |
| ATOM | 7517 | N   | VAL C 117 | 7.240 | 64.888 | 48.066 | 1.00 | 12.72 | N |
| ATOM | 7518 | CA  | VAL C 117 | 6.070 | 65.593 | 47.544 | 1.00 | 14.57 | C |
| ATOM | 7519 | C   | VAL C 117 | 4.862 | 65.334 | 48.446 | 1.00 | 14.22 | C |
| ATOM | 7520 | O   | VAL C 117 | 4.132 | 66.254 | 48.741 | 1.00 | 15.52 | O |
| ATOM | 7521 | CB  | VAL C 117 | 5.845 | 65.255 | 46.041 | 1.00 | 13.61 | C |
| ATOM | 7522 | CG1 | VAL C 117 | 4.477 | 65.818 | 45.547 | 1.00 | 13.32 | C |
| ATOM | 7523 | CG2 | VAL C 117 | 7.005 | 65.921 | 45.213 | 1.00 | 12.67 | C |
| ATOM | 7524 | N   | PRO C 118 | 4.616 | 64.066 | 48.876 | 1.00 | 13.60 | N |
| ATOM | 7525 | CA  | PRO C 118 | 3.465 | 63.824 | 49.770 | 1.00 | 14.34 | C |
| ATOM | 7526 | C   | PRO C 118 | 3.482 | 64.726 | 51.012 | 1.00 | 12.90 | C |
| ATOM | 7527 | O   | PRO C 118 | 2.452 | 65.257 | 51.461 | 1.00 | 13.77 | O |
| ATOM | 7528 | CB  | PRO C 118 | 3.614 | 62.346 | 50.154 | 1.00 | 13.59 | C |
| ATOM | 7529 | CG  | PRO C 118 | 4.210 | 61.739 | 48.861 | 1.00 | 13.64 | C |
| ATOM | 7530 | CD  | PRO C 118 | 5.207 | 62.807 | 48.376 | 1.00 | 13.50 | C |
| ATOM | 7531 | N   | GLN C 119 | 4.651 | 64.891 | 51.613 | 1.00 | 12.76 | N |
| ATOM | 7532 | CA  | GLN C 119 | 4.720 | 65.735 | 52.788 | 1.00 | 12.79 | C |
| ATOM | 7533 | C   | GLN C 119 | 4.388 | 67.193 | 52.413 | 1.00 | 12.77 | C |
| ATOM | 7534 | O   | GLN C 119 | 3.802 | 67.886 | 53.213 | 1.00 | 12.82 | O |
| ATOM | 7535 | CB  | GLN C 119 | 6.118 | 65.663 | 53.404 | 1.00 | 15.67 | C |
| ATOM | 7536 | CG  | GLN C 119 | 6.351 | 64.405 | 54.226 | 1.00 | 21.60 | C |
| ATOM | 7537 | CD  | GLN C 119 | 5.424 | 64.327 | 55.430 | 1.00 | 24.09 | C |
| ATOM | 7538 | OE1 | GLN C 119 | 4.288 | 63.827 | 55.343 | 1.00 | 27.72 | O |
| ATOM | 7539 | NE2 | GLN C 119 | 5.892 | 64.839 | 56.558 | 1.00 | 27.14 | N |
| ATOM | 7540 | N   | VAL C 120 | 4.730 | 67.632 | 51.208 | 1.00 | 12.90 | N |
| ATOM | 7541 | CA  | VAL C 120 | 4.412 | 69.023 | 50.837 | 1.00 | 15.60 | C |
| ATOM | 7542 | C   | VAL C 120 | 2.902 | 69.108 | 50.537 | 1.00 | 17.03 | C |
| ATOM | 7543 | O   | VAL C 120 | 2.265 | 70.161 | 50.739 | 1.00 | 16.78 | O |
| ATOM | 7544 | CB  | VAL C 120 | 5.265 | 69.523 | 49.619 | 1.00 | 16.66 | C |
| ATOM | 7545 | CG1 | VAL C 120 | 4.779 | 70.924 | 49.162 | 1.00 | 18.37 | C |
| ATOM | 7546 | CG2 | VAL C 120 | 6.699 | 69.650 | 50.038 | 1.00 | 18.66 | C |
| ATOM | 7547 | N   | VAL C 121 | 2.335 | 68.000 | 50.061 | 1.00 | 14.91 | N |
| ATOM | 7548 | CA  | VAL C 121 | 0.906 | 67.987 | 49.797 | 1.00 | 17.27 | C |
| ATOM | 7549 | C   | VAL C 121 | 0.171 | 68.100 | 51.122 | 1.00 | 15.97 | C |
| ATOM | 7550 | O   | VAL C 121 | -0.828 | 68.840 | 51.229 | 1.00 | 16.29 | O |
| ATOM | 7551 | CB  | VAL C 121 | 0.464 | 66.695 | 49.089 | 1.00 | 15.33 | C |
| ATOM | 7552 | CG1 | VAL C 121 | -1.041 | 66.567 | 49.152 | 1.00 | 14.28 | C |
| ATOM | 7553 | CG2 | VAL C 121 | 0.958 | 66.689 | 47.636 | 1.00 | 14.99 | C |
| ATOM | 7554 | N   | ARG C 122 | 0.648 | 67.390 | 52.153 | 1.00 | 13.32 | N |
| ATOM | 7555 | CA  | ARG C 122 | 0.002 | 67.429 | 53.450 | 1.00 | 12.99 | C |
| ATOM | 7556 | C   | ARG C 122 | 0.129 | 68.826 | 54.056 | 1.00 | 14.25 | C |
| ATOM | 7557 | O   | ARG C 122 | -0.793 | 69.305 | 54.688 | 1.00 | 14.79 | O |
| ATOM | 7558 | CB  | ARG C 122 | 0.619 | 66.339 | 54.382 | 1.00 | 13.12 | C |
| ATOM | 7559 | CG  | ARG C 122 | 0.103 | 66.303 | 55.808 | 1.00 | 12.48 | C |
| ATOM | 7560 | CD  | ARG C 122 | -1.372 | 65.804 | 55.887 | 1.00 | 15.03 | C |
| ATOM | 7561 | NE  | ARG C 122 | -2.311 | 66.930 | 55.915 | 1.00 | 16.20 | N |
| ATOM | 7562 | CZ  | ARG C 122 | -3.636 | 66.796 | 55.995 | 1.00 | 16.96 | C |
| ATOM | 7563 | NH1 | ARG C 122 | -4.176 | 65.594 | 56.026 | 1.00 | 14.62 | N |
| ATOM | 7564 | NH2 | ARG C 122 | -4.413 | 67.868 | 56.109 | 1.00 | 16.83 | N |
| ATOM | 7565 | N   | ARG C 123 | 1.289 | 69.457 | 53.841 | 1.00 | 12.93 | N |
| ATOM | 7566 | CA  | ARG C 123 | 1.577 | 70.800 | 54.350 | 1.00 | 14.20 | C |
| ATOM | 7567 | C   | ARG C 123 | 0.625 | 71.834 | 53.774 | 1.00 | 14.70 | C |
| ATOM | 7568 | O   | ARG C 123 | 0.095 | 72.652 | 54.506 | 1.00 | 14.67 | O |
| ATOM | 7569 | CB  | ARG C 123 | 3.006 | 71.200 | 54.003 | 1.00 | 12.23 | C |
| ATOM | 7570 | CG  | ARG C 123 | 3.360 | 72.691 | 54.208 | 1.00 | 13.69 | C |
| ATOM | 7571 | CD  | ARG C 123 | 3.017 | 73.174 | 55.616 | 1.00 | 13.16 | C |
| ATOM | 7572 | NE  | ARG C 123 | 2.999 | 74.647 | 55.690 | 1.00 | 14.66 | N |
| ATOM | 7573 | CZ  | ARG C 123 | 2.203 | 75.342 | 56.499 | 1.00 | 18.48 | C |
| ATOM | 7574 | NH1 | ARG C 123 | 1.362 | 74.697 | 57.310 | 1.00 | 17.43 | N |
| ATOM | 7575 | NH2 | ARG C 123 | 2.190 | 76.667 | 56.447 | 1.00 | 17.75 | N |
| ATOM | 7576 | N   | ILE C 124 | 0.412 | 71.759 | 52.469 | 1.00 | 16.40 | N |
| ATOM | 7577 | CA  | ILE C 124 | -0.461 | 72.699 | 51.770 | 1.00 | 16.87 | C |
| ATOM | 7578 | C   | ILE C 124 | -1.904 | 72.554 | 52.249 | 1.00 | 17.33 | C |
| ATOM | 7579 | O   | ILE C 124 | -2.595 | 73.556 | 52.509 | 1.00 | 19.59 | O |
| ATOM | 7580 | CB  | ILE C 124 | -0.323 | 72.480 | 50.266 | 1.00 | 18.43 | C |
| ATOM | 7581 | CG1 | ILE C 124 | 1.031 | 73.064 | 49.814 | 1.00 | 18.13 | C |
| ATOM | 7582 | CG2 | ILE C 124 | -1.545 | 73.093 | 49.525 | 1.00 | 15.41 | C |
| ATOM | 7583 | CD1 | ILE C 124 | 1.432 | 72.719 | 48.379 | 1.00 | 21.75 | C |
| ATOM | 7584 | N   | ASN C 125 | -2.362 | 71.316 | 52.384 | 1.00 | 15.63 | N |
| ATOM | 7585 | CA  | ASN C 125 | -3.699 | 71.088 | 52.879 | 1.00 | 17.27 | C |
| ATOM | 7586 | C   | ASN C 125 | -3.824 | 71.624 | 54.300 | 1.00 | 18.36 | C |
| ATOM | 7587 | O   | ASN C 125 | -4.844 | 72.251 | 54.649 | 1.00 | 17.95 | O |
| ATOM | 7588 | CB  | ASN C 125 | -4.053 | 69.603 | 52.849 | 1.00 | 18.59 | C |
| ATOM | 7589 | CG  | ASN C 125 | -4.666 | 69.188 | 51.547 | 1.00 | 21.32 | C |
| ATOM | 7590 | OD1 | ASN C 125 | -5.509 | 69.916 | 50.980 | 1.00 | 18.67 | O |
| ATOM | 7591 | ND2 | ASN C 125 | -4.266 | 68.010 | 51.051 | 1.00 | 17.33 | N |
| ATOM | 7592 | N   | ASN C 126 | -2.794 | 71.392 | 55.132 | 1.00 | 15.27 | N |
| ATOM | 7593 | CA  | ASN C 126 | -2.825 | 71.902 | 56.496 | 1.00 | 16.40 | C |

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ATOM   7594  C    ASN C 126      -2.970  73.405  56.536  1.00 16.96           C
ATOM   7595  O    ASN C 126      -3.730  73.953  57.383  1.00 17.44           O
ATOM   7596  CB   ASN C 126      -1.544  71.532  57.247  1.00 15.01           C
ATOM   7597  CG   ASN C 126      -1.525  70.103  57.629  1.00 16.07           C
ATOM   7598  OD1  ASN C 126      -2.548  69.416  57.553  1.00 15.52           O
ATOM   7599  ND2  ASN C 126      -0.365  69.623  58.073  1.00 15.91           N
ATOM   7600  N    ALA C 127      -2.223  74.064  55.652  1.00 15.92           N
ATOM   7601  CA   ALA C 127      -2.232  75.516  55.597  1.00 18.28           C
ATOM   7602  C    ALA C 127      -3.586  76.042  55.123  1.00 18.16           C
ATOM   7603  O    ALA C 127      -4.090  77.024  55.653  1.00 19.27           O
ATOM   7604  CB   ALA C 127      -1.109  76.014  54.669  1.00 14.69           C
ATOM   7605  N    LEU C 128      -4.135  75.391  54.100  1.00 18.63           N
ATOM   7606  CA   LEU C 128      -5.424  75.780  53.557  1.00 19.08           C
ATOM   7607  C    LEU C 128      -6.477  75.517  54.627  1.00 19.36           C
ATOM   7608  O    LEU C 128      -7.466  76.260  54.739  1.00 20.45           O
ATOM   7609  CB   LEU C 128      -5.737  74.986  52.261  1.00 18.40           C
ATOM   7610  CG   LEU C 128      -4.845  75.266  51.037  1.00 16.72           C
ATOM   7611  CD1  LEU C 128      -5.264  74.314  49.910  1.00 19.40           C
ATOM   7612  CD2  LEU C 128      -4.888  76.748  50.582  1.00 19.07           C
ATOM   7613  N    GLN C 129      -6.299  74.451  55.404  1.00 19.25           N
ATOM   7614  CA   GLN C 129      -7.255  74.182  56.463  1.00 19.61           C
ATOM   7615  C    GLN C 129      -7.210  75.266  57.533  1.00 19.03           C
ATOM   7616  O    GLN C 129      -8.254  75.632  58.077  1.00 18.60           O
ATOM   7617  CB   GLN C 129      -7.019  72.820  57.098  1.00 19.92           C
ATOM   7618  CG   GLN C 129      -7.501  71.678  56.234  1.00 21.59           C
ATOM   7619  CD   GLN C 129      -7.148  70.376  56.846  1.00 24.94           C
ATOM   7620  OE1  GLN C 129      -5.974  70.046  56.958  1.00 26.83           O
ATOM   7621  NE2  GLN C 129      -8.158  69.615  57.267  1.00 27.31           N
ATOM   7622  N    ARG C 130      -6.011  75.761  57.845  1.00 19.47           N
ATOM   7623  CA   ARG C 130      -5.863  76.809  58.848  1.00 20.11           C
ATOM   7624  C    ARG C 130      -6.639  78.045  58.337  1.00 20.90           C
ATOM   7625  O    ARG C 130      -7.389  78.669  59.111  1.00 21.84           O
ATOM   7626  CB   ARG C 130      -4.381  77.186  59.074  1.00 18.65           C
ATOM   7627  CG   ARG C 130      -4.174  78.123  60.283  1.00 18.13           C
ATOM   7628  CD   ARG C 130      -4.595  77.503  61.606  1.00 21.12           C
ATOM   7629  NE   ARG C 130      -3.592  76.556  62.128  1.00 17.44           N
ATOM   7630  CZ   ARG C 130      -3.864  75.420  62.777  1.00 17.67           C
ATOM   7631  NH1  ARG C 130      -5.125  75.017  63.011  1.00 18.19           N
ATOM   7632  NH2  ARG C 130      -2.847  74.670  63.227  1.00 18.18           N
ATOM   7633  N    ALA C 131      -6.477  78.375  57.055  1.00 21.65           N
ATOM   7634  CA   ALA C 131      -7.186  79.539  56.482  1.00 22.32           C
ATOM   7635  C    ALA C 131      -8.698  79.335  56.491  1.00 23.69           C
ATOM   7636  O    ALA C 131      -9.438  80.287  56.741  1.00 23.69           O
ATOM   7637  CB   ALA C 131      -6.698  79.839  55.071  1.00 21.15           C
ATOM   7638  N    ASP C 132      -9.155  78.114  56.222  1.00 22.64           N
ATOM   7639  CA   ASP C 132     -10.591  77.797  56.244  1.00 23.42           C
ATOM   7640  C    ASP C 132     -11.087  78.011  57.694  1.00 24.48           C
ATOM   7641  O    ASP C 132     -12.141  78.624  57.927  1.00 22.83           O
ATOM   7642  CB   ASP C 132     -10.824  76.336  55.793  1.00 26.00           C
ATOM   7643  CG   ASP C 132     -12.283  75.898  55.895  1.00 26.98           C
ATOM   7644  OD1  ASP C 132     -13.146  76.621  55.348  1.00 31.00           O
ATOM   7645  OD2  ASP C 132     -12.577  74.839  56.508  1.00 25.64           O
ATOM   7646  N    GLN C 133     -10.313  77.537  58.675  1.00 22.42           N
ATOM   7647  CA   GLN C 133     -10.677  77.689  60.102  1.00 22.67           C
ATOM   7648  C    GLN C 133     -10.793  79.156  60.543  1.00 23.84           C
ATOM   7649  O    GLN C 133     -11.746  79.522  61.235  1.00 23.58           O
ATOM   7650  CB   GLN C 133      -9.645  76.957  60.983  1.00 21.09           C
ATOM   7651  CG   GLN C 133      -9.701  75.446  60.822  1.00 21.87           C
ATOM   7652  CD   GLN C 133      -8.396  74.765  61.293  1.00 23.52           C
ATOM   7653  OE1  GLN C 133      -8.290  73.543  61.289  1.00 27.74           O
ATOM   7654  NE2  GLN C 133      -7.417  75.566  61.686  1.00 23.09           N
ATOM   7655  N    ILE C 134      -9.826  79.971  60.118  1.00 23.69           N
ATOM   7656  CA   ILE C 134      -9.757  81.380  60.447  1.00 24.45           C
ATOM   7657  C    ILE C 134     -10.934  82.094  59.791  1.00 26.17           C
ATOM   7658  O    ILE C 134     -11.680  82.824  60.457  1.00 25.88           O
ATOM   7659  CB   ILE C 134      -8.411  81.969  59.962  1.00 23.41           C
ATOM   7660  CG1  ILE C 134      -7.273  81.355  60.783  1.00 22.28           C
ATOM   7661  CG2  ILE C 134      -8.346  83.493  60.154  1.00 23.77           C
ATOM   7662  CD1  ILE C 134      -5.964  81.652  60.175  1.00 20.75           C
ATOM   7663  N    ALA C 135     -11.131  81.840  58.496  1.00 27.27           N
ATOM   7664  CA   ALA C 135     -12.222  82.482  57.775  1.00 28.31           C
ATOM   7665  C    ALA C 135     -13.550  82.250  58.485  1.00 28.92           C
ATOM   7666  O    ALA C 135     -14.374  83.183  58.614  1.00 29.96           O
ATOM   7667  CB   ALA C 135     -12.280  81.957  56.341  1.00 27.99           C
ATOM   7668  N    LYS C 136     -13.762  81.032  58.964  1.00 27.74           N
ATOM   7669  CA   LYS C 136     -15.012  80.706  59.635  1.00 29.32           C
ATOM   7670  C    LYS C 136     -15.220  81.520  60.922  1.00 30.28           C
ATOM   7671  O    LYS C 136     -16.339  82.005  61.165  1.00 30.69           O
ATOM   7672  CB   LYS C 136     -15.094  79.201  59.917  1.00 28.78           C
ATOM   7673  CG   LYS C 136     -16.442  78.764  60.404  1.00 27.39           C
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ATOM   7674  CD   LYS C 136     -16.523  77.273  60.605  1.00 28.46          C
ATOM   7675  CE   LYS C 136     -17.862  76.874  61.187  1.00 29.38          C
ATOM   7676  NZ   LYS C 136     -18.017  75.394  61.348  1.00 30.50          N
ATOM   7677  N    ILE C 137     -14.172  81.693  61.733  1.00 29.56          N
ATOM   7678  CA   ILE C 137     -14.313  82.477  62.975  1.00 30.31          C
ATOM   7679  C    ILE C 137     -14.359  83.990  62.727  1.00 30.50          C
ATOM   7680  O    ILE C 137     -14.882  84.744  63.564  1.00 29.97          O
ATOM   7681  CB   ILE C 137     -13.182  82.204  64.014  1.00 30.11          C
ATOM   7682  CG1  ILE C 137     -11.833  82.543  63.428  1.00 29.46          C
ATOM   7683  CG2  ILE C 137     -13.235  80.763  64.470  1.00 28.83          C
ATOM   7684  CD1  ILE C 137     -10.713  82.588  64.458  1.00 30.64          C
ATOM   7685  N    GLU C 138     -13.795  84.431  61.610  1.00 29.30          N
ATOM   7686  CA   GLU C 138     -13.820  85.845  61.254  1.00 31.77          C
ATOM   7687  C    GLU C 138     -15.076  86.090  60.395  1.00 33.17          C
ATOM   7688  O    GLU C 138     -15.366  87.228  59.998  1.00 33.99          O
ATOM   7689  CB   GLU C 138     -12.581  86.239  60.443  1.00 31.08          C
ATOM.  7690  CG   GLU C 138     -11.269  86.204  61.210  1.00 33.13          C
ATOM   7691  CD   GLU C 138     -10.074  86.642  60.354  1.00 33.91          C
ATOM   7692  OE1  GLU C 138     -10.213  86.678  59.110  1.00 36.64          O
ATOM   7693  OE2  GLU C 138      -8.987  86.943  60.909  1.00 35.82          O
ATOM   7694  N    GLY C 139     -15.822  85.015  60.133  1.00 34.29          N
ATOM   7695  CA   GLY C 139     -17.012  85.121  59.305  1.00 36.34          C
ATOM   7696  C    GLY C 139     -16.677  85.739  57.948  1.00 37.75          C
ATOM   7697  O    GLY C 139     -17.398  86.619  57.446  1.00 38.69          O
ATOM   7698  N    ASP C 140     -15.569  85.291  57.363  1.00 37.60          N
ATOM   7699  CA   ASP C 140     -15.115  85.760  56.057  1.00 36.81          C
ATOM   7700  C    ASP C 140     -15.623  84.815  54.938  1.00 37.60          C
ATOM   7701  O    ASP C 140     -15.289  83.617  54.904  1.00 34.47          O
ATOM   7702  CB   ASP C 140     -13.586  85.825  56.042  1.00 38.64          C
ATOM   7703  CG   ASP C 140     -13.034  86.291  54.712  1.00 39.54          C
ATOM   7704  OD1  ASP C 140     -13.834  86.465  53.760  1.00 39.36          O
ATOM   7705  OD2  ASP C 140     -11.801  86.484  54.623  1.00 38.95          O
ATOM   7706  N    THR C 141     -16.460  85.351  54.046  1.00 37.37          N
ATOM   7707  CA   THR C 141     -16.987  84.574  52.927  1.00 37.56          C
ATOM   7708  C    THR C 141     -16.264  84.995  51.658  1.00 36.22          C
ATOM   7709  O    THR C 141     -16.684  84.687  50.562  1.00 37.00          O
ATOM   7710  CB   THR C 141     -18.476  84.808  52.700  1.00 39.55          C
ATOM   7711  OG1  THR C 141     -18.699  86.218  52.590  1.00 40.34          O
ATOM   7712  CG2  THR C 141     -19.311  84.202  53.828  1.00 38.33          C
ATOM   7713  N    SER C 142     -15.170  85.714  51.821  1.00 36.97          N
ATOM   7714  CA   SER C 142     -14.377  86.164  50.695  1.00 37.02          C
ATOM   7715  C    SER C 142     -14.002  84.989  49.758  1.00 37.65          C
ATOM   7716  O    SER C 142     -13.904  85.160  48.536  1.00 38.01          O
ATOM   7717  CB   SER C 142     -13.128  86.847  51.253  1.00 37.74          C
ATOM   7718  OG   SER C 142     -12.045  86.863  50.353  1.00 41.38          O
ATOM   7719  N    VAL C 143     -13.795  83.802  50.329  1.00 35.79          N
ATOM   7720  CA   VAL C 143     -13.422  82.639  49.527  1.00 33.75          C
ATOM   7721  C    VAL C 143     -14.404  81.525  49.729  1.00 32.33          C
ATOM   7722  O    VAL C 143     -14.699  81.128  50.842  1.00 32.85          O
ATOM   7723  CB   VAL C 143     -12.011  82.153  49.872  1.00 33.19          C
ATOM   7724  CG1  VAL C 143     -11.745  80.806  49.228  1.00 29.71          C
ATOM   7725  CG2  VAL C 143     -11.002  83.175  49.389  1.00 32.25          C
ATOM   7726  N    GLU C 144     -14.912  81.004  48.630  1.00 33.44          N
ATOM   7727  CA   GLU C 144     -15.906  79.964  48.709  1.00 33.06          C
ATOM   7728  C    GLU C 144     -15.345  78.574  48.996  1.00 31.94          C
ATOM   7729  O    GLU C 144     -16.002  77.764  49.651  1.00 30.73          O
ATOM   7730  CB   GLU C 144     -16.742  79.975  47.425  1.00 36.32          C
ATOM   7731  CG   GLU C 144     -15.983  79.735  46.134  1.00 40.98          C
ATOM   7732  CD   GLU C 144     -14.572  80.377  46.075  1.00 44.58          C
ATOM   7733  OE1  GLU C 144     -14.465  81.631  46.128  1.00 44.65          O
ATOM   7734  OE2  GLU C 144     -13.572  79.602  45.967  1.00 44.84          O
ATOM   7735  N    ASN C 145     -14.147  78.292  48.508  1.00 30.60          N
ATOM   7736  CA   ASN C 145     -13.555  76.983  48.751  1.00 29.63          C
ATOM   7737  C    ASN C 145     -12.087  77.147  49.108  1.00 28.18          C
ATOM   7738  O    ASN C 145     -11.244  77.364  48.223  1.00 29.70          O
ATOM   7739  CB   ASN C 145     -13.667  76.086  47.518  1.00 30.06          C
ATOM   7740  CG   ASN C 145     -13.214  74.650  47.797  1.00 29.99          C
ATOM   7741  OD1  ASN C 145     -12.865  73.899  46.871  1.00 31.91          O
ATOM   7742  ND2  ASN C 145     -13.240  74.261  49.069  1.00 25.80          N
ATOM   7743  N    TRP C 146     -11.759  77.047  50.397  1.00 25.33          N
ATOM   7744  CA   TRP C 146     -10.365  77.213  50.765  1.00 25.81          C
ATOM   7745  C    TRP C 146      -9.574  75.973  50.390  1.00 25.27          C
ATOM   7746  O    TRP C 146      -8.389  76.071  50.053  1.00 24.92          O
ATOM   7747  CB   TRP C 146     -10.216  77.495  52.255  1.00 23.71          C
ATOM   7748  CG   TRP C 146     -10.369  78.935  52.539  1.00 25.20          C
ATOM   7749  CD1  TRP C 146     -11.448  79.555  53.102  1.00 25.15          C
ATOM   7750  CD2  TRP C 146      -9.420  79.953  52.250  1.00 24.05          C
ATOM   7751  NE1  TRP C 146     -11.219  80.909  53.185  1.00 25.57          N
ATOM   7752  CE2  TRP C 146      -9.983  81.182  52.670  1.00 24.27          C
ATOM   7753  CE3  TRP C 146      -8.150  79.953  51.676  1.00 22.09          C
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ATOM   7754  CZ2 TRP C 146      -9.302  82.415  52.532  1.00 25.46           C
ATOM   7755  CZ3 TRP C 146      -7.470  81.177  51.532  1.00 25.58           C
ATOM   7756  CH2 TRP C 146      -8.049  82.387  51.961  1.00 22.43           C
ATOM   7757  N   LEU C 147     -10.250  74.829  50.424  1.00 23.94           N
ATOM   7758  CA  LEU C 147      -9.591  73.558  50.089  1.00 24.12           C
ATOM   7759  C   LEU C 147      -9.520  73.306  48.582  1.00 21.96           C
ATOM   7760  O   LEU C 147     -10.176  72.435  48.070  1.00 23.05           O
ATOM   7761  CB  LEU C 147     -10.308  72.433  50.806  1.00 25.85           C
ATOM   7762  CG  LEU C 147      -9.815  72.443  52.249  1.00 29.22           C
ATOM   7763  CD1 LEU C 147     -10.812  71.797  53.127  1.00 29.41           C
ATOM   7764  CD2 LEU C 147      -8.451  71.684  52.332  1.00 29.70           C
ATOM   7765  N   ALA C 148      -8.727  74.109  47.888  1.00 21.73           N
ATOM   7766  CA  ALA C 148      -8.577  73.977  46.465  1.00 21.79           C
ATOM   7767  C   ALA C 148      -7.907  72.655  46.164  1.00 21.94           C
ATOM   7768  O   ALA C 148      -7.077  72.178  46.941  1.00 22.16           O
ATOM   7769  CB  ALA C 148      -7.725  75.133  45.916  1.00 20.77           C
ATOM   7770  N   PRO C 149      -8.268  72.019  45.039  1.00 22.02           N
ATOM   7771  CA  PRO C 149      -7.617  70.736  44.737  1.00 20.78           C
ATOM   7772  C   PRO C 149      -6.148  70.956  44.418  1.00 20.26           C
ATOM   7773  O   PRO C 149      -5.768  71.984  43.827  1.00 19.99           O
ATOM   7774  CB  PRO C 149      -8.395  70.227  43.526  1.00 22.13           C
ATOM   7775  CG  PRO C 149      -8.779  71.549  42.829  1.00 23.86           C
ATOM   7776  CD  PRO C 149      -9.233  72.379  43.987  1.00 21.99           C
ATOM   7777  N   ILE C 150      -5.322  69.997  44.843  1.00 18.19           N
ATOM   7778  CA  ILE C 150      -3.874  70.058  44.611  1.00 17.77           C
ATOM   7779  C   ILE C 150      -3.512  69.025  43.562  1.00 16.77           C
ATOM   7780  O   ILE C 150      -3.908  67.863  43.687  1.00 19.03           O
ATOM   7781  CB  ILE C 150      -3.076  69.650  45.886  1.00 17.32           C
ATOM   7782  CG1 ILE C 150      -3.402  70.616  47.023  1.00 19.42           C
ATOM   7783  CG2 ILE C 150      -1.545  69.630  45.558  1.00 16.18           C
ATOM   7784  CD1 ILE C 150      -3.195  70.010  48.443  1.00 17.96           C
ATOM   7785  N   VAL C 151      -2.756  69.428  42.552  1.00 17.52           N
ATOM   7786  CA  VAL C 151      -2.307  68.481  41.535  1.00 19.26           C
ATOM   7787  C   VAL C 151      -0.786  68.332  41.784  1.00 20.15           C
ATOM   7788  O   VAL C 151      -0.024  69.314  41.702  1.00 19.77           O
ATOM   7789  CB  VAL C 151      -2.571  68.989  40.092  1.00 20.15           C
ATOM   7790  CG1 VAL C 151      -1.835  68.095  39.067  1.00 20.58           C
ATOM   7791  CG2 VAL C 151      -4.061  68.945  39.803  1.00 21.60           C
ATOM   7792  N   ALA C 152      -0.344  67.112  42.093  1.00 16.83           N
ATOM   7793  CA  ALA C 152       1.080  66.926  42.412  1.00 17.22           C
ATOM   7794  C   ALA C 152       1.941  66.127  41.450  1.00 16.82           C
ATOM   7795  O   ALA C 152       1.472  65.260  40.710  1.00 18.84           O
ATOM   7796  CB  ALA C 152       1.220  66.336  43.845  1.00 16.23           C
ATOM   7797  N   ASP C 153       3.224  66.445  41.478  1.00 16.33           N
ATOM   7798  CA  ASP C 153       4.217  65.810  40.634  1.00 16.32           C
ATOM   7799  C   ASP C 153       4.663  64.427  41.166  1.00 16.17           C
ATOM   7800  O   ASP C 153       5.270  64.339  42.216  1.00 16.22           O
ATOM   7801  CB  ASP C 153       5.404  66.732  40.602  1.00 17.33           C
ATOM   7802  CG  ASP C 153       6.349  66.448  39.529  1.00 15.32           C
ATOM   7803  OD1 ASP C 153       6.390  65.342  38.972  1.00 18.84           O
ATOM   7804  OD2 ASP C 153       7.116  67.374  39.271  1.00 15.97           O
ATOM   7805  N   GLY C 154       4.379  63.384  40.404  1.00 15.54           N
ATOM   7806  CA  GLY C 154       4.748  62.023  40.760  1.00 16.67           C
ATOM   7807  C   GLY C 154       6.042  61.656  40.029  1.00 15.52           C
ATOM   7808  O   GLY C 154       6.578  60.558  40.188  1.00 15.78           O
ATOM   7809  N   GLU C 155       6.549  62.600  39.236  1.00 16.47           N
ATOM   7810  CA  GLU C 155       7.768  62.397  38.455  1.00 17.49           C
ATOM   7811  C   GLU C 155       7.732  61.111  37.663  1.00 18.31           C
ATOM   7812  O   GLU C 155       6.762  60.890  36.937  1.00 17.35           O
ATOM   7813  CB  GLU C 155       9.003  62.474  39.356  1.00 18.83           C
ATOM   7814  CG  GLU C 155       9.055  63.854  40.048  1.00 19.41           C
ATOM   7815  CD  GLU C 155      10.437  64.258  40.567  1.00 24.24           C
ATOM   7816  OE1 GLU C 155      11.366  63.435  40.527  1.00 23.00           O
ATOM   7817  OE2 GLU C 155      10.567  65.420  41.026  1.00 24.20           O
ATOM   7818  N   ALA C 156       8.786  60.290  37.779  1.00 17.55           N
ATOM   7819  CA  ALA C 156       8.859  59.022  37.082  1.00 18.23           C
ATOM   7820  C   ALA C 156       8.576  57.859  38.036  1.00 15.92           C
ATOM   7821  O   ALA C 156       8.891  56.716  37.746  1.00 17.36           O
ATOM   7822  CB  ALA C 156      10.263  58.857  36.409  1.00 16.06           C
ATOM   7823  N   GLY C 157       8.028  58.163  39.193  1.00 15.19           N
ATOM   7824  CA  GLY C 157       7.682  57.110  40.133  1.00 16.54           C
ATOM   7825  C   GLY C 157       8.777  56.564  41.023  1.00 14.40           C
ATOM   7826  O   GLY C 157       8.521  55.696  41.840  1.00 17.10           O
ATOM   7827  N   PHE C 158       9.988  57.069  40.891  1.00 13.64           N
ATOM   7828  CA  PHE C 158      11.070  56.634  41.759  1.00 13.64           C
ATOM   7829  C   PHE C 158      11.348  55.144  41.760  1.00 14.05           C
ATOM   7830  O   PHE C 158      11.748  54.574  42.755  1.00 15.93           O
ATOM   7831  CB  PHE C 158      10.830  57.099  43.189  1.00 14.91           C
ATOM   7832  CG  PHE C 158      10.881  58.587  43.329  1.00 15.11           C
ATOM   7833  CD1 PHE C 158       9.739  59.348  43.139  1.00 15.65           C
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| ATOM | 7834 | CD2 | PHE | C | 158 | 12.064 | 59.224 | 43.602 | 1.00 | 13.22 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 7835 | CE1 | PHE | C | 158 | 9.785 | 60.725 | 43.224 | 1.00 | 15.81 | C |
| ATOM | 7836 | CE2 | PHE | C | 158 | 12.125 | 60.602 | 43.688 | 1.00 | 11.13 | C |
| ATOM | 7837 | CZ | PHE | C | 158 | 11.000 | 61.353 | 43.499 | 1.00 | 14.91 | C |
| ATOM | 7838 | N | GLY | C | 159 | 11.135 | 54.519 | 40.637 | 1.00 | 14.37 | N |
| ATOM | 7839 | CA | GLY | C | 159 | 11.433 | 53.105 | 40.599 | 1.00 | 16.73 | C |
| ATOM | 7840 | C | GLY | C | 159 | 10.506 | 52.363 | 39.657 | 1.00 | 17.56 | C |
| ATOM | 7841 | O | GLY | C | 159 | 10.231 | 52.817 | 38.541 | 1.00 | 18.06 | O |
| ATOM | 7842 | N | GLY | C | 160 | 10.057 | 51.193 | 40.112 | 1.00 | 18.13 | N |
| ATOM | 7843 | CA | GLY | C | 160 | 9.161 | 50.356 | 39.322 | 1.00 | 18.26 | C |
| ATOM | 7844 | C | GLY | C | 160 | 7.700 | 50.614 | 39.676 | 1.00 | 19.70 | C |
| ATOM | 7845 | O | GLY | C | 160 | 7.375 | 51.574 | 40.383 | 1.00 | 17.39 | O |
| ATOM | 7846 | N | ALA | C | 161 | 6.821 | 49.737 | 39.191 | 1.00 | 18.55 | N |
| ATOM | 7847 | CA | ALA | C | 161 | 5.416 | 49.891 | 39.452 | 1.00 | 17.58 | C |
| ATOM | 7848 | C | ALA | C | 161 | 5.087 | 49.951 | 40.946 | 1.00 | 16.01 | C |
| ATOM | 7849 | O | ALA | C | 161 | 4.112 | 50.600 | 41.319 | 1.00 | 16.24 | O |
| ATOM | 7850 | CB | ALA | C | 161 | 4.669 | 48.755 | 38.775 | 1.00 | 17.43 | C |
| ATOM | 7851 | N | LEU | C | 162 | 5.873 | 49.291 | 41.808 | 1.00 | 12.93 | N |
| ATOM | 7852 | CA | LEU | C | 162 | 5.590 | 49.294 | 43.235 | 1.00 | 12.69 | C |
| ATOM | 7853 | C | LEU | C | 162 | 5.984 | 50.649 | 43.891 | 1.00 | 12.70 | C |
| ATOM | 7854 | O | LEU | C | 162 | 5.376 | 51.078 | 44.865 | 1.00 | 13.13 | O |
| ATOM | 7855 | CB | LEU | C | 162 | 6.334 | 48.147 | 43.943 | 1.00 | 14.69 | C |
| ATOM | 7856 | CG | LEU | C | 162 | 5.990 | 46.721 | 43.536 | 1.00 | 15.80 | C |
| ATOM | 7857 | CD1 | LEU | C | 162 | 6.640 | 45.753 | 44.514 | 1.00 | 15.57 | C |
| ATOM | 7858 | CD2 | LEU | C | 162 | 4.489 | 46.555 | 43.641 | 1.00 | 16.30 | C |
| ATOM | 7859 | N | ASN | C | 163 | 6.986 | 51.320 | 43.328 | 1.00 | 13.38 | N |
| ATOM | 7860 | CA | ASN | C | 163 | 7.390 | 52.627 | 43.861 | 1.00 | 11.09 | C |
| ATOM | 7861 | C | ASN | C | 163 | 6.299 | 53.615 | 43.464 | 1.00 | 11.21 | C |
| ATOM | 7862 | O | ASN | C | 163 | 5.933 | 54.513 | 44.242 | 1.00 | 10.70 | O |
| ATOM | 7863 | CB | ASN | C | 163 | 8.754 | 53.044 | 43.290 | 1.00 | 12.81 | C |
| ATOM | 7864 | CG | ASN | C | 163 | 9.867 | 52.158 | 43.814 | 1.00 | 13.59 | C |
| ATOM | 7865 | OD1 | ASN | C | 163 | 10.417 | 52.398 | 44.904 | 1.00 | 15.71 | O |
| ATOM | 7866 | ND2 | ASN | C | 163 | 10.171 | 51.108 | 43.063 | 1.00 | 6.72 | N |
| ATOM | 7867 | N | VAL | C | 164 | 5.760 | 53.413 | 42.268 | 1.00 | 10.92 | N |
| ATOM | 7868 | CA | VAL | C | 164 | 4.696 | 54.260 | 41.730 | 1.00 | 12.30 | C |
| ATOM | 7869 | C | VAL | C | 164 | 3.506 | 54.100 | 42.657 | 1.00 | 12.04 | C |
| ATOM | 7870 | O | VAL | C | 164 | 2.920 | 55.064 | 43.121 | 1.00 | 12.73 | O |
| ATOM | 7871 | CB | VAL | C | 164 | 4.263 | 53.783 | 40.326 | 1.00 | 14.09 | C |
| ATOM | 7872 | CG1 | VAL | C | 164 | 2.866 | 54.405 | 39.939 | 1.00 | 10.39 | C |
| ATOM | 7873 | CG2 | VAL | C | 164 | 5.329 | 54.186 | 39.274 | 1.00 | 12.85 | C |
| ATOM | 7874 | N | TYR | C | 165 | 3.144 | 52.851 | 42.903 | 1.00 | 12.68 | N |
| ATOM | 7875 | CA | TYR | C | 165 | 2.003 | 52.566 | 43.754 | 1.00 | 14.25 | C |
| ATOM | 7876 | C | TYR | C | 165 | 2.107 | 53.240 | 45.144 | 1.00 | 14.73 | C |
| ATOM | 7877 | O | TYR | C | 165 | 1.161 | 53.894 | 45.623 | 1.00 | 15.77 | O |
| ATOM | 7878 | CB | TYR | C | 165 | 1.870 | 51.047 | 43.900 | 1.00 | 12.61 | C |
| ATOM | 7879 | CG | TYR | C | 165 | 0.678 | 50.669 | 44.739 | 1.00 | 12.96 | C |
| ATOM | 7880 | CD1 | TYR | C | 165 | 0.757 | 50.688 | 46.117 | 1.00 | 13.66 | C |
| ATOM | 7881 | CD2 | TYR | C | 165 | -0.544 | 50.303 | 44.140 | 1.00 | 15.37 | C |
| ATOM | 7882 | CE1 | TYR | C | 165 | -0.345 | 50.369 | 46.910 | 1.00 | 16.27 | C |
| ATOM | 7883 | CE2 | TYR | C | 165 | -1.656 | 49.969 | 44.919 | 1.00 | 15.96 | C |
| ATOM | 7884 | CZ | TYR | C | 165 | -1.563 | 50.015 | 46.295 | 1.00 | 17.62 | C |
| ATOM | 7885 | OH | TYR | C | 165 | -2.687 | 49.841 | 47.090 | 1.00 | 16.15 | O |
| ATOM | 7886 | N | GLU | C | 166 | 3.264 | 53.119 | 45.772 | 1.00 | 13.50 | N |
| ATOM | 7887 | CA | GLU | C | 166 | 3.442 | 53.704 | 47.091 | 1.00 | 13.74 | C |
| ATOM | 7888 | C | GLU | C | 166 | 3.431 | 55.216 | 47.031 | 1.00 | 10.86 | C |
| ATOM | 7889 | O | GLU | C | 166 | 2.934 | 55.854 | 47.949 | 1.00 | 12.20 | O |
| ATOM | 7890 | CB | GLU | C | 166 | 4.759 | 53.219 | 47.708 | 1.00 | 12.81 | C |
| ATOM | 7891 | CG | GLU | C | 166 | 4.667 | 51.775 | 48.251 | 1.00 | 12.46 | C |
| ATOM | 7892 | CD | GLU | C | 166 | 3.551 | 51.575 | 49.260 | 1.00 | 14.97 | C |
| ATOM | 7893 | OE1 | GLU | C | 166 | 3.530 | 52.343 | 50.248 | 1.00 | 13.04 | O |
| ATOM | 7894 | OE2 | GLU | C | 166 | 2.698 | 50.656 | 49.072 | 1.00 | 15.01 | O |
| ATOM | 7895 | N | LEU | C | 167 | 4.002 | 55.792 | 45.980 | 1.00 | 11.71 | N |
| ATOM | 7896 | CA | LEU | C | 167 | 4.011 | 57.261 | 45.909 | 1.00 | 11.42 | C |
| ATOM | 7897 | C | LEU | C | 167 | 2.575 | 57.748 | 45.766 | 1.00 | 10.74 | C |
| ATOM | 7898 | O | LEU | C | 167 | 2.153 | 58.677 | 46.494 | 1.00 | 9.86 | O |
| ATOM | 7899 | CB | LEU | C | 167 | 4.878 | 57.750 | 44.742 | 1.00 | 9.92 | C |
| ATOM | 7900 | CG | LEU | C | 167 | 4.864 | 59.265 | 44.444 | 1.00 | 10.91 | C |
| ATOM | 7901 | CD1 | LEU | C | 167 | 5.169 | 60.066 | 45.734 | 1.00 | 10.93 | C |
| ATOM | 7902 | CD2 | LEU | C | 167 | 5.850 | 59.595 | 43.320 | 1.00 | 12.98 | C |
| ATOM | 7903 | N | GLN | C | 168 | 1.809 | 57.101 | 44.882 | 1.00 | 12.28 | N |
| ATOM | 7904 | CA | GLN | C | 168 | 0.402 | 57.482 | 44.687 | 1.00 | 12.12 | C |
| ATOM | 7905 | C | GLN | C | 168 | -0.378 | 57.319 | 45.993 | 1.00 | 12.18 | C |
| ATOM | 7906 | O | GLN | C | 168 | -1.174 | 58.204 | 46.357 | 1.00 | 14.03 | O |
| ATOM | 7907 | CB | GLN | C | 168 | -0.257 | 56.628 | 43.601 | 1.00 | 13.46 | C |
| ATOM | 7908 | CG | GLN | C | 168 | -1.785 | 56.932 | 43.426 | 1.00 | 12.66 | C |
| ATOM | 7909 | CD | GLN | C | 168 | -2.092 | 58.193 | 42.606 | 1.00 | 18.80 | C |
| ATOM | 7910 | OE1 | GLN | C | 168 | -1.535 | 59.266 | 42.874 | 1.00 | 18.19 | O |
| ATOM | 7911 | NE2 | GLN | C | 168 | -3.004 | 58.073 | 41.603 | 1.00 | 15.53 | N |
| ATOM | 7912 | N | LYS | C | 169 | -0.186 | 56.193 | 46.684 | 1.00 | 12.35 | N |
| ATOM | 7913 | CA | LYS | C | 169 | -0.845 | 55.951 | 47.960 | 1.00 | 12.93 | C |

| ATOM | 7914 | C | LYS | C | 169 | -0.518 | 57.057 | 48.973 | 1.00 | 14.52 | C |
|------|------|------|------|------|-----|--------|--------|--------|------|-------|---|
| ATOM | 7915 | O | LYS | C | 169 | -1.419 | 57.582 | 49.682 | 1.00 | 12.37 | O |
| ATOM | 7916 | CB | LYS | C | 169 | -0.445 | 54.571 | 48.526 | 1.00 | 12.36 | C |
| ATOM | 7917 | CG | LYS | C | 169 | -1.009 | 54.259 | 49.934 | 1.00 | 12.37 | C |
| ATOM | 7918 | CD | LYS | C | 169 | -0.603 | 52.816 | 50.389 | 1.00 | 11.40 | C |
| ATOM | 7919 | CE | LYS | C | 169 | -0.797 | 52.659 | 51.885 | 1.00 | 14.83 | C |
| ATOM | 7920 | NZ | LYS | C | 169 | -0.702 | 51.214 | 52.254 | 1.00 | 17.94 | N |
| ATOM | 7921 | N | ALA | C | 170 | 0.767 | 57.416 | 49.056 | 1.00 | 11.63 | N |
| ATOM | 7922 | CA | ALA | C | 170 | 1.193 | 58.475 | 49.968 | 1.00 | 12.22 | C |
| ATOM | 7923 | C | ALA | C | 170 | 0.620 | 59.829 | 49.560 | 1.00 | 12.05 | C |
| ATOM | 7924 | O | ALA | C | 170 | 0.262 | 60.634 | 50.426 | 1.00 | 15.64 | O |
| ATOM | 7925 | CB | ALA | C | 170 | 2.788 | 58.534 | 50.032 | 1.00 | 10.48 | C |
| ATOM | 7926 | N | LEU | C | 171 | 0.525 | 60.108 | 48.262 | 1.00 | 12.77 | N |
| ATOM | 7927 | CA | LEU | C | 171 | -0.027 | 61.395 | 47.845 | 1.00 | 13.40 | C |
| ATOM | 7928 | C | LEU | C | 171 | -1.520 | 61.479 | 48.262 | 1.00 | 13.41 | C |
| ATOM | 7929 | O | LEU | C | 171 | -1.990 | 62.514 | 48.750 | 1.00 | 13.45 | O |
| ATOM | 7930 | CB | LEU | C | 171 | 0.115 | 61.561 | 46.336 | 1.00 | 13.89 | C |
| ATOM | 7931 | CG | LEU | C | 171 | 1.529 | 61.803 | 45.767 | 1.00 | 12.96 | C |
| ATOM | 7932 | CD1 | LEU | C | 171 | 1.472 | 61.658 | 44.264 | 1.00 | 12.70 | C |
| ATOM | 7933 | CD2 | LEU | C | 171 | 2.029 | 63.231 | 46.139 | 1.00 | 16.56 | C |
| ATOM | 7934 | N | ILE | C | 172 | -2.238 | 60.374 | 48.131 | 1.00 | 14.65 | N |
| ATOM | 7935 | CA | ILE | C | 172 | -3.651 | 60.332 | 48.528 | 1.00 | 15.09 | C |
| ATOM | 7936 | C | ILE | C | 172 | -3.810 | 60.485 | 50.045 | 1.00 | 16.19 | C |
| ATOM | 7937 | O | ILE | C | 172 | -4.656 | 61.254 | 50.562 | 1.00 | 14.87 | O |
| ATOM | 7938 | CB | ILE | C | 172 | -4.257 | 59.015 | 48.063 | 1.00 | 15.31 | C |
| ATOM | 7939 | CG1 | ILE | C | 172 | -4.473 | 59.074 | 46.562 | 1.00 | 17.54 | C |
| ATOM | 7940 | CG2 | ILE | C | 172 | -5.510 | 58.681 | 48.855 | 1.00 | 13.50 | C |
| ATOM | 7941 | CD1 | ILE | C | 172 | -4.709 | 57.692 | 45.939 | 1.00 | 17.17 | C |
| ATOM | 7942 | N | ALA | C | 173 | -2.992 | 59.767 | 50.794 | 1.00 | 13.56 | N |
| ATOM | 7943 | CA | ALA | C | 173 | -3.070 | 59.885 | 52.233 | 1.00 | 14.00 | C |
| ATOM | 7944 | C | ALA | C | 173 | -2.914 | 61.357 | 52.661 | 1.00 | 14.89 | C |
| ATOM | 7945 | O | ALA | C | 173 | -3.524 | 61.796 | 53.642 | 1.00 | 16.26 | O |
| ATOM | 7946 | CB | ALA | C | 173 | -1.970 | 59.014 | 52.885 | 1.00 | 13.97 | C |
| ATOM | 7947 | N | ALA | C | 174 | -2.089 | 62.107 | 51.927 | 1.00 | 12.81 | N |
| ATOM | 7948 | CA | ALA | C | 174 | -1.790 | 63.490 | 52.238 | 1.00 | 14.42 | C |
| ATOM | 7949 | C | ALA | C | 174 | -2.898 | 64.407 | 51.742 | 1.00 | 15.36 | C |
| ATOM | 7950 | O | ALA | C | 174 | -2.883 | 65.618 | 52.033 | 1.00 | 15.25 | O |
| ATOM | 7951 | CB | ALA | C | 174 | -0.482 | 63.898 | 51.604 | 1.00 | 13.58 | C |
| ATOM | 7952 | N | GLY | C | 175 | -3.824 | 63.826 | 50.972 | 1.00 | 15.83 | N |
| ATOM | 7953 | CA | GLY | C | 175 | -4.952 | 64.596 | 50.463 | 1.00 | 16.70 | C |
| ATOM | 7954 | C | GLY | C | 175 | -4.837 | 65.167 | 49.058 | 1.00 | 17.18 | C |
| ATOM | 7955 | O | GLY | C | 175 | -5.461 | 66.195 | 48.767 | 1.00 | 18.01 | O |
| ATOM | 7956 | N | VAL | C | 176 | -4.073 | 64.526 | 48.167 | 1.00 | 16.75 | N |
| ATOM | 7957 | CA | VAL | C | 176 | -3.908 | 65.060 | 46.800 | 1.00 | 15.29 | C |
| ATOM | 7958 | C | VAL | C | 176 | -5.206 | 64.873 | 45.978 | 1.00 | 16.44 | C |
| ATOM | 7959 | O | VAL | C | 176 | -5.991 | 63.981 | 46.264 | 1.00 | 16.76 | O |
| ATOM | 7960 | CB | VAL | C | 176 | -2.707 | 64.362 | 46.041 | 1.00 | 16.70 | C |
| ATOM | 7961 | CG1 | VAL | C | 176 | -3.133 | 63.055 | 45.389 | 1.00 | 15.63 | C |
| ATOM | 7962 | CG2 | VAL | C | 176 | -2.174 | 65.266 | 44.997 | 1.00 | 15.67 | C |
| ATOM | 7963 | N | ALA | C | 177 | -5.386 | 65.699 | 44.958 | 1.00 | 17.34 | N |
| ATOM | 7964 | CA | ALA | C | 177 | -6.580 | 65.612 | 44.100 | 1.00 | 18.49 | C |
| ATOM | 7965 | C | ALA | C | 177 | -6.240 | 64.945 | 42.773 | 1.00 | 18.41 | C |
| ATOM | 7966 | O | ALA | C | 177 | -7.051 | 64.175 | 42.200 | 1.00 | 19.71 | O |
| ATOM | 7967 | CB | ALA | C | 177 | -7.134 | 67.025 | 43.863 | 1.00 | 15.06 | C |
| ATOM | 7968 | N | GLY | C | 178 | -5.038 | 65.235 | 42.294 | 1.00 | 17.05 | N |
| ATOM | 7969 | CA | GLY | C | 178 | -4.548 | 64.682 | 41.044 | 1.00 | 17.57 | C |
| ATOM | 7970 | C | GLY | C | 178 | -3.026 | 64.511 | 41.063 | 1.00 | 17.22 | C |
| ATOM | 7971 | O | GLY | C | 178 | -2.344 | 65.209 | 41.818 | 1.00 | 15.09 | O |
| ATOM | 7972 | N | SER | C | 179 | -2.517 | 63.576 | 40.263 | 1.00 | 15.89 | N |
| ATOM | 7973 | CA | SER | C | 179 | -1.083 | 63.317 | 40.169 | 1.00 | 15.53 | C |
| ATOM | 7974 | C | SER | C | 179 | -0.693 | 62.988 | 38.728 | 1.00 | 15.73 | C |
| ATOM | 7975 | O | SER | C | 179 | -1.487 | 62.395 | 37.954 | 1.00 | 15.48 | O |
| ATOM | 7976 | CB | SER | C | 179 | -0.687 | 62.195 | 41.145 | 1.00 | 14.16 | C |
| ATOM | 7977 | OG | SER | C | 179 | -1.395 | 60.971 | 40.909 | 1.00 | 15.23 | O |
| ATOM | 7978 | N | HIS | C | 180 | 0.519 | 63.403 | 38.362 | 1.00 | 15.62 | N |
| ATOM | 7979 | CA | HIS | C | 180 | 1.037 | 63.197 | 37.023 | 1.00 | 16.35 | C |
| ATOM | 7980 | C | HIS | C | 180 | 2.300 | 62.346 | 37.026 | 1.00 | 14.97 | C |
| ATOM | 7981 | O | HIS | C | 180 | 3.100 | 62.373 | 37.964 | 1.00 | 13.37 | O |
| ATOM | 7982 | CB | HIS | C | 180 | 1.254 | 64.547 | 36.312 | 1.00 | 16.07 | C |
| ATOM | 7983 | CG | HIS | C | 180 | 2.427 | 65.340 | 36.801 | 1.00 | 16.69 | C |
| ATOM | 7984 | ND1 | HIS | C | 180 | 2.286 | 66.592 | 37.372 | 1.00 | 18.95 | N |
| ATOM | 7985 | CD2 | HIS | C | 180 | 3.755 | 65.185 | 36.570 | 1.00 | 15.36 | C |
| ATOM | 7986 | CE1 | HIS | C | 180 | 3.469 | 67.178 | 37.452 | 1.00 | 17.61 | C |
| ATOM | 7987 | NE2 | HIS | C | 180 | 4.376 | 66.348 | 36.968 | 1.00 | 18.11 | N |
| ATOM | 7988 | N | TRP | C | 181 | 2.445 | 61.595 | 35.948 | 1.00 | 15.03 | N |
| ATOM | 7989 | CA | TRP | C | 181 | 3.480 | 60.573 | 35.813 | 1.00 | 14.27 | C |
| ATOM | 7990 | C | TRP | C | 181 | 4.081 | 60.609 | 34.430 | 1.00 | 16.22 | C |
| ATOM | 7991 | O | TRP | C | 181 | 3.363 | 60.567 | 33.429 | 1.00 | 19.19 | O |
| ATOM | 7992 | CB | TRP | C | 181 | 2.794 | 59.197 | 36.075 | 1.00 | 13.01 | C |
| ATOM | 7993 | CG | TRP | C | 181 | 1.963 | 59.177 | 37.357 | 1.00 | 13.87 | C |

| ATOM | 7994 | CD1 | TRP | C | 181 | 0.660 | 59.607 | 37.529 | 1.00 | 12.14 | C |
|------|------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 7995 | CD2 | TRP | C | 181 | 2.440 | 58.820 | 38.659 | 1.00 | 11.52 | C |
| ATOM | 7996 | NE1 | TRP | C | 181 | 0.325 | 59.548 | 38.856 | 1.00 | 12.42 | N |
| ATOM | 7997 | CE2 | TRP | C | 181 | 1.400 | 59.081 | 39.576 | 1.00 | 13.00 | C |
| ATOM | 7998 | CE3 | TRP | C | 181 | 3.665 | 58.313 | 39.138 | 1.00 | 11.92 | C |
| ATOM | 7999 | CZ2 | TRP | C | 181 | 1.542 | 58.873 | 40.962 | 1.00 | 12.40 | C |
| ATOM | 8000 | CZ3 | TRP | C | 181 | 3.819 | 58.116 | 40.534 | 1.00 | 10.37 | C |
| ATOM | 8001 | CH2 | TRP | C | 181 | 2.762 | 58.397 | 41.428 | 1.00 | 13.30 | C |
| ATOM | 8002 | N   | GLU | C | 182 | 5.404 | 60.624 | 34.347 | 1.00 | 17.25 | N |
| ATOM | 8003 | CA  | GLU | C | 182 | 6.048 | 60.750 | 33.047 | 1.00 | 17.12 | C |
| ATOM | 8004 | C   | GLU | C | 182 | 6.754 | 59.501 | 32.616 | 1.00 | 16.33 | C |
| ATOM | 8005 | O   | GLU | C | 182 | 7.149 | 58.660 | 33.485 | 1.00 | 14.49 | O |
| ATOM | 8006 | CB  | GLU | C | 182 | 7.027 | 61.921 | 33.091 | 1.00 | 18.97 | C |
| ATOM | 8007 | CG  | GLU | C | 182 | 8.198 | 61.651 | 34.053 | 1.00 | 19.19 | C |
| ATOM | 8008 | CD  | GLU | C | 182 | 8.633 | 62.900 | 34.788 | 1.00 | 23.20 | C |
| ATOM | 8009 | OE1 | GLU | C | 182 | 7.817 | 63.851 | 34.937 | 1.00 | 23.72 | O |
| ATOM | 8010 | OE2 | GLU | C | 182 | 9.786 | 62.922 | 35.252 | 1.00 | 24.72 | O |
| ATOM | 8011 | N   | ASP | C | 183 | 6.899 | 59.371 | 31.287 | 1.00 | 14.91 | N |
| ATOM | 8012 | CA  | ASP | C | 183 | 7.488 | 58.192 | 30.683 | 1.00 | 15.71 | C |
| ATOM | 8013 | C   | ASP | C | 183 | 9.016 | 58.175 | 30.575 | 1.00 | 16.67 | C |
| ATOM | 8014 | O   | ASP | C | 183 | 9.581 | 57.772 | 29.562 | 1.00 | 17.69 | O |
| ATOM | 8015 | CB  | ASP | C | 183 | 6.820 | 57.881 | 29.314 | 1.00 | 15.19 | C |
| ATOM | 8016 | CG  | ASP | C | 183 | 6.904 | 59.037 | 28.301 | 1.00 | 18.59 | C |
| ATOM | 8017 | OD1 | ASP | C | 183 | 7.575 | 60.055 | 28.597 | 1.00 | 15.14 | O |
| ATOM | 8018 | OD2 | ASP | C | 183 | 6.277 | 58.924 | 27.208 | 1.00 | 18.24 | O |
| ATOM | 8019 | N   | GLN | C | 184 | 9.669 | 58.590 | 31.649 | 1.00 | 17.67 | N |
| ATOM | 8020 | CA  | GLN | C | 184 | 11.135 | 58.575 | 31.701 | 1.00 | 18.98 | C |
| ATOM | 8021 | C   | GLN | C | 184 | 11.635 | 57.485 | 32.652 | 1.00 | 18.36 | C |
| ATOM | 8022 | O   | GLN | C | 184 | 10.917 | 57.027 | 33.556 | 1.00 | 18.10 | O |
| ATOM | 8023 | CB  | GLN | C | 184 | 11.693 | 59.902 | 32.232 | 1.00 | 19.26 | C |
| ATOM | 8024 | CG  | GLN | C | 184 | 11.367 | 61.153 | 31.425 | 1.00 | 20.59 | C |
| ATOM | 8025 | CD  | GLN | C | 184 | 12.033 | 62.379 | 32.033 | 1.00 | 20.72 | C |
| ATOM | 8026 | OE1 | GLN | C | 184 | 13.263 | 62.398 | 32.237 | 1.00 | 20.21 | O |
| ATOM | 8027 | NE2 | GLN | C | 184 | 11.237 | 63.414 | 32.318 | 1.00 | 20.15 | N |
| ATOM | 8028 | N   | LEU | C | 185 | 12.899 | 57.098 | 32.471 | 1.00 | 19.19 | N |
| ATOM | 8029 | CA  | LEU | C | 185 | 13.536 | 56.118 | 33.326 | 1.00 | 18.32 | C |
| ATOM | 8030 | C   | LEU | C | 185 | 13.818 | 56.875 | 34.628 | 1.00 | 20.30 | C |
| ATOM | 8031 | O   | LEU | C | 185 | 14.576 | 57.841 | 34.609 | 1.00 | 19.59 | O |
| ATOM | 8032 | CB  | LEU | C | 185 | 14.859 | 55.676 | 32.690 | 1.00 | 19.43 | C |
| ATOM | 8033 | CG  | LEU | C | 185 | 15.764 | 54.814 | 33.551 | 1.00 | 20.04 | C |
| ATOM | 8034 | CD1 | LEU | C | 185 | 15.029 | 53.551 | 34.011 | 1.00 | 18.55 | C |
| ATOM | 8035 | CD2 | LEU | C | 185 | 16.976 | 54.468 | 32.744 | 1.00 | 17.02 | C |
| ATOM | 8036 | N   | ALA | C | 186 | 13.251 | 56.411 | 35.752 | 1.00 | 19.18 | N |
| ATOM | 8037 | CA  | ALA | C | 186 | 13.415 | 57.112 | 37.038 | 1.00 | 19.19 | C |
| ATOM | 8038 | C   | ALA | C | 186 | 14.888 | 57.391 | 37.419 | 1.00 | 20.35 | C |
| ATOM | 8039 | O   | ALA | C | 186 | 15.248 | 58.496 | 37.848 | 1.00 | 21.01 | O |
| ATOM | 8040 | CB  | ALA | C | 186 | 12.700 | 56.313 | 38.158 | 1.00 | 16.14 | C |
| ATOM | 8041 | N   | SER | C | 187 | 15.753 | 56.405 | 37.222 | 1.00 | 19.73 | N |
| ATOM | 8042 | CA  | SER | C | 187 | 17.155 | 56.600 | 37.599 | 1.00 | 21.46 | C |
| ATOM | 8043 | C   | SER | C | 187 | 17.861 | 57.687 | 36.759 | 1.00 | 21.23 | C |
| ATOM | 8044 | O   | SER | C | 187 | 18.930 | 58.140 | 37.108 | 1.00 | 20.36 | O |
| ATOM | 8045 | CB  | SER | C | 187 | 17.908 | 55.273 | 37.481 | 1.00 | 19.29 | C |
| ATOM | 8046 | OG  | SER | C | 187 | 17.953 | 54.840 | 36.130 | 1.00 | 23.26 | O |
| ATOM | 8047 | N   | GLU | C | 188 | 17.278 | 58.072 | 35.641 | 1.00 | 19.73 | N |
| ATOM | 8048 | CA  | GLU | C | 188 | 17.879 | 59.121 | 34.818 | 1.00 | 20.99 | C |
| ATOM | 8049 | C   | GLU | C | 188 | 16.913 | 60.284 | 34.608 | 1.00 | 20.25 | C |
| ATOM | 8050 | O   | GLU | C | 188 | 17.090 | 61.087 | 33.698 | 1.00 | 18.43 | O |
| ATOM | 8051 | CB  | GLU | C | 188 | 18.298 | 58.582 | 33.449 | 1.00 | 22.32 | C |
| ATOM | 8052 | CG  | GLU | C | 188 | 19.425 | 57.591 | 33.440 | 1.00 | 23.80 | C |
| ATOM | 8053 | CD  | GLU | C | 188 | 20.702 | 58.089 | 34.124 | 1.00 | 25.08 | C |
| ATOM | 8054 | OE1 | GLU | C | 188 | 21.053 | 59.302 | 34.036 | 1.00 | 27.23 | O |
| ATOM | 8055 | OE2 | GLU | C | 188 | 21.372 | 57.236 | 34.728 | 1.00 | 27.26 | O |
| ATOM | 8056 | N   | LYS | C | 189 | 15.887 | 60.367 | 35.441 | 1.00 | 19.10 | N |
| ATOM | 8057 | CA  | LYS | C | 189 | 14.882 | 61.413 | 35.320 | 1.00 | 18.93 | C |
| ATOM | 8058 | C   | LYS | C | 189 | 15.409 | 62.839 | 35.183 | 1.00 | 21.51 | C |
| ATOM | 8059 | O   | LYS | C | 189 | 16.412 | 63.190 | 35.808 | 1.00 | 21.42 | O |
| ATOM | 8060 | CB  | LYS | C | 189 | 13.933 | 61.333 | 36.518 | 1.00 | 16.12 | C |
| ATOM | 8061 | CG  | LYS | C | 189 | 12.805 | 62.365 | 36.525 | 1.00 | 20.24 | C |
| ATOM | 8062 | CD  | LYS | C | 189 | 13.259 | 63.749 | 36.985 | 1.00 | 19.12 | C |
| ATOM | 8063 | CE  | LYS | C | 189 | 12.086 | 64.626 | 37.365 | 1.00 | 21.24 | C |
| ATOM | 8064 | NZ  | LYS | C | 189 | 11.199 | 64.958 | 36.206 | 1.00 | 24.40 | N |
| ATOM | 8065 | N   | LYS | C | 190 | 14.677 | 63.660 | 34.412 | 1.00 | 21.44 | N |
| ATOM | 8066 | CA  | LYS | C | 190 | 15.028 | 65.073 | 34.138 | 1.00 | 20.53 | C |
| ATOM | 8067 | C   | LYS | C | 190 | 13.814 | 65.978 | 34.064 | 1.00 | 22.49 | C |
| ATOM | 8068 | O   | LYS | C | 190 | 12.704 | 65.546 | 33.751 | 1.00 | 21.59 | O |
| ATOM | 8069 | CB  | LYS | C | 190 | 15.705 | 65.227 | 32.771 | 1.00 | 21.16 | C |
| ATOM | 8070 | CG  | LYS | C | 190 | 17.005 | 64.476 | 32.537 | 1.00 | 21.35 | C |
| ATOM | 8071 | CD  | LYS | C | 190 | 18.119 | 64.944 | 33.419 | 1.00 | 23.83 | C |
| ATOM | 8072 | CE  | LYS | C | 190 | 19.451 | 64.291 | 32.993 | 1.00 | 23.01 | C |
| ATOM | 8073 | NZ  | LYS | C | 190 | 19.448 | 62.793 | 33.119 | 1.00 | 23.73 | N |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8074 | N | CYS | C | 191 | 14.036 | 67.252 | 34.356 | 1.00 20.56 | N |
| ATOM | 8075 | CA | CYS | C | 191 | 13.007 | 68.260 | 34.179 | 1.00 22.71 | C |
| ATOM | 8076 | C | CYS | C | 191 | 12.757 | 68.157 | 32.656 | 1.00 21.65 | C |
| ATOM | 8077 | O | CYS | C | 191 | 13.686 | 67.862 | 31.897 | 1.00 19.52 | O |
| ATOM | 8078 | CB | CYS | C | 191 | 13.618 | 69.607 | 34.545 | 1.00 23.57 | C |
| ATOM | 8079 | SG | CYS | C | 191 | 13.010 | 71.044 | 33.712 | 1.00 25.78 | S |
| ATOM | 8080 | N | GLY | C | 192 | 11.523 | 68.398 | 32.216 | 1.00 21.52 | N |
| ATOM | 8081 | CA | GLY | C | 192 | 11.204 | 68.273 | 30.795 | 1.00 23.03 | C |
| ATOM | 8082 | C | GLY | C | 192 | 12.032 | 69.153 | 29.874 | 1.00 24.05 | C |
| ATOM | 8083 | O | GLY | C | 192 | 12.137 | 68.898 | 28.657 | 1.00 23.53 | O |
| ATOM | 8084 | N | HIS | C | 193 | 12.638 | 70.178 | 30.459 | 1.00 23.37 | N |
| ATOM | 8085 | CA | HIS | C | 193 | 13.427 | 71.119 | 29.680 | 1.00 25.78 | C |
| ATOM | 8086 | C | HIS | C | 193 | 14.948 | 71.042 | 29.876 | 1.00 26.70 | C |
| ATOM | 8087 | O | HIS | C | 193 | 15.696 | 71.971 | 29.536 | 1.00 27.24 | O |
| ATOM | 8088 | CB | HIS | C | 193 | 12.869 | 72.495 | 29.947 | 1.00 25.04 | C |
| ATOM | 8089 | CG | HIS | C | 193 | 11.413 | 72.590 | 29.615 | 1.00 26.10 | C |
| ATOM | 8090 | ND1 | HIS | C | 193 | 10.426 | 72.721 | 30.572 | 1.00 26.27 | N |
| ATOM | 8091 | CD2 | HIS | C | 193 | 10.771 | 72.502 | 28.427 | 1.00 27.87 | C |
| ATOM | 8092 | CE1 | HIS | C | 193 | 9.242 | 72.713 | 29.988 | 1.00 27.17 | C |
| ATOM | 8093 | NE2 | HIS | C | 193 | 9.421 | 72.583 | 28.684 | 1.00 26.99 | N |
| ATOM | 8094 | N | LEU | C | 194 | 15.409 | 69.920 | 30.420 | 1.00 25.55 | N |
| ATOM | 8095 | CA | LEU | C | 194 | 16.847 | 69.684 | 30.552 | 1.00 24.61 | C |
| ATOM | 8096 | C | LEU | C | 194 | 17.142 | 68.602 | 29.521 | 1.00 24.77 | C |
| ATOM | 8097 | O | LEU | C | 194 | 16.207 | 67.963 | 29.015 | 1.00 23.51 | O |
| ATOM | 8098 | CB | LEU | C | 194 | 17.225 | 69.190 | 31.950 | 1.00 24.33 | C |
| ATOM | 8099 | CG | LEU | C | 194 | 17.195 | 70.220 | 33.088 | 1.00 25.54 | C |
| ATOM | 8100 | CD1 | LEU | C | 194 | 17.374 | 69.505 | 34.433 | 1.00 23.21 | C |
| ATOM | 8101 | CD2 | LEU | C | 194 | 18.305 | 71.266 | 32.871 | 1.00 23.00 | C |
| ATOM | 8102 | N | GLY | C | 195 | 18.418 | 68.416 | 29.175 | 1.00 23.60 | N |
| ATOM | 8103 | CA | GLY | C | 195 | 18.769 | 67.384 | 28.225 | 1.00 23.72 | C |
| ATOM | 8104 | C | GLY | C | 195 | 19.049 | 66.099 | 28.993 | 1.00 24.08 | C |
| ATOM | 8105 | O | GLY | C | 195 | 18.874 | 66.066 | 30.211 | 1.00 21.95 | O |
| ATOM | 8106 | N | GLY | C | 196 | 19.472 | 65.053 | 28.291 | 1.00 23.09 | N |
| ATOM | 8107 | CA | GLY | C | 196 | 19.803 | 63.804 | 28.953 | 1.00 23.24 | C |
| ATOM | 8108 | C | GLY | C | 196 | 18.621 | 62.937 | 29.374 | 1.00 23.41 | C |
| ATOM | 8109 | O | GLY | C | 196 | 18.768 | 62.118 | 30.298 | 1.00 23.05 | O |
| ATOM | 8110 | N | LYS | C | 197 | 17.471 | 63.105 | 28.702 | 1.00 21.37 | N |
| ATOM | 8111 | CA | LYS | C | 197 | 16.257 | 62.337 | 29.025 | 1.00 19.21 | C |
| ATOM | 8112 | C | LYS | C | 197 | 16.253 | 60.974 | 28.356 | 1.00 19.66 | C |
| ATOM | 8113 | O | LYS | C | 197 | 16.629 | 60.830 | 27.170 | 1.00 19.72 | O |
| ATOM | 8114 | CB | LYS | C | 197 | 14.991 | 63.124 | 28.637 | 1.00 19.83 | C |
| ATOM | 8115 | CG | LYS | C | 197 | 14.963 | 64.489 | 29.293 | 1.00 19.39 | C |
| ATOM | 8116 | CD | LYS | C | 197 | 13.605 | 65.214 | 29.244 | 1.00 20.05 | C |
| ATOM | 8117 | CE | LYS | C | 197 | 13.134 | 65.448 | 27.804 | 1.00 19.72 | C |
| ATOM | 8118 | NZ | LYS | C | 197 | 11.852 | 66.234 | 27.875 | 1.00 22.84 | N |
| ATOM | 8119 | N | VAL | C | 198 | 15.851 | 59.967 | 29.139 | 1.00 17.73 | N |
| ATOM | 8120 | CA | VAL | C | 198 | 15.780 | 58.595 | 28.673 | 1.00 18.94 | C |
| ATOM | 8121 | C | VAL | C | 198 | 14.343 | 58.105 | 28.884 | 1.00 16.19 | C |
| ATOM | 8122 | O | VAL | C | 198 | 13.804 | 58.132 | 30.000 | 1.00 15.93 | O |
| ATOM | 8123 | CB | VAL | C | 198 | 16.732 | 57.698 | 29.459 | 1.00 19.25 | C |
| ATOM | 8124 | CG1 | VAL | C | 198 | 16.719 | 56.305 | 28.884 | 1.00 22.27 | C |
| ATOM | 8125 | CG2 | VAL | C | 198 | 18.148 | 58.277 | 29.382 | 1.00 21.33 | C |
| ATOM | 8126 | N | LEU | C | 199 | 13.714 | 57.707 | 27.794 | 1.00 16.68 | N |
| ATOM | 8127 | CA | LEU | C | 199 | 12.335 | 57.230 | 27.881 | 1.00 15.69 | C |
| ATOM | 8128 | C | LEU | C | 199 | 12.304 | 55.748 | 28.252 | 1.00 15.36 | C |
| ATOM | 8129 | O | LEU | C | 199 | 13.304 | 55.014 | 28.130 | 1.00 14.10 | O |
| ATOM | 8130 | CB | LEU | C | 199 | 11.621 | 57.399 | 26.524 | 1.00 16.52 | C |
| ATOM | 8131 | CG | LEU | C | 199 | 11.490 | 58.764 | 25.859 | 1.00 12.52 | C |
| ATOM | 8132 | CD1 | LEU | C | 199 | 10.877 | 58.568 | 24.468 | 1.00 17.41 | C |
| ATOM | 8133 | CD2 | LEU | C | 199 | 10.625 | 59.700 | 26.683 | 1.00 15.63 | C |
| ATOM | 8134 | N | ILE | C | 200 | 11.140 | 55.295 | 28.713 | 1.00 15.29 | N |
| ATOM | 8135 | CA | ILE | C | 200 | 10.956 | 53.860 | 28.974 | 1.00 14.10 | C |
| ATOM | 8136 | C | ILE | C | 200 | 9.899 | 53.425 | 27.926 | 1.00 15.11 | C |
| ATOM | 8137 | O | ILE | C | 200 | 9.200 | 54.273 | 27.325 | 1.00 11.53 | O |
| ATOM | 8138 | CB | ILE | C | 200 | 10.515 | 53.591 | 30.440 | 1.00 14.49 | C |
| ATOM | 8139 | CG1 | ILE | C | 200 | 9.565 | 54.653 | 30.958 | 1.00 18.28 | C |
| ATOM | 8140 | CG2 | ILE | C | 200 | 11.737 | 53.708 | 31.358 | 1.00 17.33 | C |
| ATOM | 8141 | CD1 | ILE | C | 200 | 8.114 | 54.525 | 30.540 | 1.00 18.88 | C |
| ATOM | 8142 | N | PRO | C | 201 | 9.800 | 52.117 | 27.658 | 1.00 14.86 | N |
| ATOM | 8143 | CA | PRO | C | 201 | 8.855 | 51.575 | 26.678 | 1.00 16.28 | C |
| ATOM | 8144 | C | PRO | C | 201 | 7.428 | 52.027 | 26.916 | 1.00 16.19 | C |
| ATOM | 8145 | O | PRO | C | 201 | 7.010 | 52.221 | 28.055 | 1.00 18.02 | O |
| ATOM | 8146 | CB | PRO | C | 201 | 9.026 | 50.076 | 26.829 | 1.00 14.55 | C |
| ATOM | 8147 | CG | PRO | C | 201 | 10.522 | 49.964 | 27.276 | 1.00 16.01 | C |
| ATOM | 8148 | CD | PRO | C | 201 | 10.554 | 51.032 | 28.321 | 1.00 13.84 | C |
| ATOM | 8149 | N | THR | C | 202 | 6.674 | 52.181 | 25.836 | 1.00 15.90 | N |
| ATOM | 8150 | CA | THR | C | 202 | 5.298 | 52.650 | 25.952 | 1.00 15.65 | C |
| ATOM | 8151 | C | THR | C | 202 | 4.501 | 51.794 | 26.939 | 1.00 16.00 | C |
| ATOM | 8152 | O | THR | C | 202 | 3.746 | 52.317 | 27.763 | 1.00 14.89 | O |
| ATOM | 8153 | CB | THR | C | 202 | 4.603 | 52.601 | 24.570 | 1.00 17.26 | C |

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ATOM   8154  OG1 THR C 202      5.149  53.633  23.749  1.00 17.19           O
ATOM   8155  CG2 THR C 202      3.084  52.824  24.724  1.00 14.00           C
ATOM   8156  N   GLN C 203      4.689  50.482  26.864  1.00 13.74           N
ATOM   8157  CA  GLN C 203      3.985  49.561  27.760  1.00 14.85           C
ATOM   8158  C   GLN C 203      4.399  49.787  29.223  1.00 15.87           C
ATOM   8159  O   GLN C 203      3.597  49.631  30.151  1.00 14.88           O
ATOM   8160  CB  GLN C 203      4.274  48.091  27.382  1.00 14.75           C
ATOM   8161  CG  GLN C 203      3.320  47.081  28.145  1.00 18.76           C
ATOM   8162  CD  GLN C 203      1.831  47.452  27.997  1.00 20.25           C
ATOM   8163  OE1 GLN C 203      1.378  47.833  26.919  1.00 21.49           O
ATOM   8164  NE2 GLN C 203      1.065  47.328  29.088  1.00 20.00           N
ATOM   8165  N   GLN C 204      5.656  50.158  29.444  1.00 14.60           N
ATOM   8166  CA  GLN C 204      6.051  50.352  30.826  1.00 14.35           C
ATOM   8167  C   GLN C 204      5.314  51.557  31.378  1.00 14.63           C
ATOM   8168  O   GLN C 204      4.913  51.557  32.548  1.00 15.35           O
ATOM   8169  CB  GLN C 204      7.559  50.574  30.955  1.00 13.98           C
ATOM   8170  CG  GLN C 204      8.033  50.593  32.418  1.00 16.35           C
ATOM   8171  CD  GLN C 204      9.573  50.559  32.515  1.00 16.86           C
ATOM   8172  OE1 GLN C 204     10.236  49.959  31.666  1.00 17.41           O
ATOM   8173  NE2 GLN C 204     10.123  51.166  33.566  1.00 19.09           N
ATOM   8174  N   HIS C 205      5.102  52.581  30.558  1.00 15.34           N
ATOM   8175  CA  HIS C 205      4.403  53.743  31.118  1.00 14.35           C
ATOM   8176  C   HIS C 205      2.916  53.428  31.356  1.00 16.26           C
ATOM   8177  O   HIS C 205      2.298  53.918  32.301  1.00 15.78           O
ATOM   8178  CB  HIS C 205      4.521  55.002  30.268  1.00 15.73           C
ATOM   8179  CG  HIS C 205      4.301  56.219  31.092  1.00 16.86           C
ATOM   8180  ND1 HIS C 205      3.431  57.232  30.756  1.00 21.62           N
ATOM   8181  CD2 HIS C 205      4.741  56.502  32.342  1.00 16.41           C
ATOM   8182  CE1 HIS C 205      3.341  58.086  31.764  1.00 15.82           C
ATOM   8183  NE2 HIS C 205      4.126  57.664  32.737  1.00 20.62           N
ATOM   8184  N   ILE C 206      2.356  52.575  30.521  1.00 15.49           N
ATOM   8185  CA  ILE C 206      0.982  52.134  30.736  1.00 15.68           C
ATOM   8186  C   ILE C 206      0.945  51.386  32.097  1.00 15.52           C
ATOM   8187  O   ILE C 206     -0.014  51.494  32.873  1.00 14.60           O
ATOM   8188  CB  ILE C 206      0.541  51.216  29.573  1.00 17.57           C
ATOM   8189  CG1 ILE C 206      0.339  52.043  28.297  1.00 16.66           C
ATOM   8190  CG2 ILE C 206     -0.760  50.502  29.945  1.00 16.99           C
ATOM   8191  CD1 ILE C 206      0.043  51.171  27.055  1.00 19.25           C
ATOM   8192  N   ARG C 207      1.995  50.631  32.405  1.00 16.06           N
ATOM   8193  CA  ARG C 207      2.051  49.935  33.692  1.00 16.17           C
ATOM   8194  C   ARG C 207      2.047  50.957  34.818  1.00 14.87           C
ATOM   8195  O   ARG C 207      1.424  50.767  35.867  1.00 14.67           O
ATOM   8196  CB  ARG C 207      3.318  49.048  33.791  1.00 18.80           C
ATOM   8197  CG  ARG C 207      3.204  47.731  33.028  1.00 23.62           C
ATOM   8198  CD  ARG C 207      4.210  46.671  33.542  1.00 29.87           C
ATOM   8199  NE  ARG C 207      5.588  46.960  33.147  1.00 31.99           N
ATOM   8200  CZ  ARG C 207      6.071  46.773  31.917  1.00 34.53           C
ATOM   8201  NH1 ARG C 207      5.284  46.288  30.955  1.00 35.48           N
ATOM   8202  NH2 ARG C 207      7.341  47.067  31.649  1.00 33.77           N
ATOM   8203  N   THR C 208      2.772  52.053  34.630  1.00 14.72           N
ATOM   8204  CA  THR C 208      2.815  53.084  35.650  1.00 13.97           C
ATOM   8205  C   THR C 208      1.452  53.734  35.836  1.00 13.37           C
ATOM   8206  O   THR C 208      0.994  53.938  36.936  1.00 13.13           O
ATOM   8207  CB  THR C 208      3.844  54.151  35.255  1.00 13.18           C
ATOM   8208  OG1 THR C 208      5.146  53.587  35.441  1.00 12.38           O
ATOM   8209  CG2 THR C 208      3.684  55.424  36.073  1.00 12.26           C
ATOM   8210  N   LEU C 209      0.785  54.006  34.741  1.00 14.47           N
ATOM   8211  CA  LEU C 209     -0.503  54.640  34.857  1.00 15.68           C
ATOM   8212  C   LEU C 209     -1.520  53.680  35.487  1.00 15.77           C
ATOM   8213  O   LEU C 209     -2.412  54.109  36.227  1.00 15.08           O
ATOM   8214  CB  LEU C 209     -0.950  55.149  33.478  1.00 15.66           C
ATOM   8215  CG  LEU C 209     -0.130  56.249  32.792  1.00 13.33           C
ATOM   8216  CD1 LEU C 209     -0.663  56.495  31.396  1.00 16.13           C
ATOM   8217  CD2 LEU C 209     -0.229  57.536  33.577  1.00 12.25           C
ATOM   8218  N   THR C 210     -1.380  52.395  35.195  1.00 16.08           N
ATOM   8219  CA  THR C 210     -2.259  51.366  35.756  1.00 16.04           C
ATOM   8220  C   THR C 210     -2.020  51.248  37.282  1.00 16.46           C
ATOM   8221  O   THR C 210     -2.978  51.150  38.077  1.00 15.49           O
ATOM   8222  CB  THR C 210     -1.971  50.009  35.079  1.00 15.88           C
ATOM   8223  OG1 THR C 210     -2.416  50.072  33.728  1.00 16.23           O
ATOM   8224  CG2 THR C 210     -2.662  48.836  35.800  1.00 14.96           C
ATOM   8225  N   SER C 211     -0.747  51.246  37.684  1.00 13.55           N
ATOM   8226  CA  SER C 211     -0.407  51.162  39.096  1.00 13.16           C
ATOM   8227  C   SER C 211     -0.982  52.380  39.847  1.00 12.86           C
ATOM   8228  O   SER C 211     -1.468  52.242  40.974  1.00 15.35           O
ATOM   8229  CB  SER C 211      1.127  51.106  39.273  1.00 12.71           C
ATOM   8230  OG  SER C 211      1.486  51.007  40.660  1.00 13.54           O
ATOM   8231  N   ALA C 212     -0.907  53.552  39.239  1.00 12.79           N
ATOM   8232  CA  ALA C 212     -1.395  54.773  39.867  1.00 15.15           C
ATOM   8233  C   ALA C 212     -2.916  54.718  40.035  1.00 17.58           C
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| ATOM | 8234 | O | ALA C 212 | -3.424 | 55.205 | 41.044 | 1.00 | 16.97 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 8235 | CB | ALA C 212 | -0.965 | 56.002 | 39.082 | 1.00 | 12.53 | C |
| ATOM | 8236 | N | ARG C 213 | -3.617 | 54.124 | 39.063 | 1.00 | 16.85 | N |
| ATOM | 8237 | CA | ARG C 213 | -5.080 | 53.962 | 39.159 | 1.00 | 16.37 | C |
| ATOM | 8238 | C | ARG C 213 | -5.399 | 52.936 | 40.210 | 1.00 | 15.00 | C |
| ATOM | 8239 | O | ARG C 213 | -6.294 | 53.152 | 41.026 | 1.00 | 17.02 | O |
| ATOM | 8240 | CB | ARG C 213 | -5.707 | 53.508 | 37.806 | 1.00 | 17.95 | C |
| ATOM | 8241 | CG | ARG C 213 | -7.234 | 53.444 | 37.875 | 1.00 | 19.45 | C |
| ATOM | 8242 | CD | ARG C 213 | -7.858 | 54.836 | 37.899 | 1.00 | 20.59 | C |
| ATOM | 8243 | NE | ARG C 213 | -7.665 | 55.419 | 36.584 | 1.00 | 23.55 | N |
| ATOM | 8244 | CZ | ARG C 213 | -7.820 | 56.701 | 36.256 | 1.00 | 24.80 | C |
| ATOM | 8245 | NH1 | ARG C 213 | -8.181 | 57.614 | 37.175 | 1.00 | 21.00 | N |
| ATOM | 8246 | NH2 | ARG C 213 | -7.624 | 57.051 | 34.980 | 1.00 | 23.60 | N |
| ATOM | 8247 | N | LEU C 214 | -4.680 | 51.811 | 40.222 | 1.00 | 15.14 | N |
| ATOM | 8248 | CA | LEU C 214 | -4.928 | 50.778 | 41.223 | 1.00 | 16.23 | C |
| ATOM | 8249 | C | LEU C 214 | -4.768 | 51.329 | 42.659 | 1.00 | 16.17 | C |
| ATOM | 8250 | O | LEU C 214 | -5.582 | 51.061 | 43.530 | 1.00 | 15.34 | O |
| ATOM | 8251 | CB | LEU C 214 | -3.988 | 49.590 | 41.025 | 1.00 | 16.14 | C |
| ATOM | 8252 | CG | LEU C 214 | -4.126 | 48.465 | 42.039 | 1.00 | 17.47 | C |
| ATOM | 8253 | CD1 | LEU C 214 | -5.506 | 47.841 | 41.863 | 1.00 | 17.68 | C |
| ATOM | 8254 | CD2 | LEU C 214 | -3.032 | 47.434 | 41.866 | 1.00 | 14.89 | C |
| ATOM | 8255 | N | ALA C 215 | -3.704 | 52.076 | 42.926 | 1.00 | 16.66 | N |
| ATOM | 8256 | CA | ALA C 215 | -3.535 | 52.611 | 44.272 | 1.00 | 15.32 | C |
| ATOM | 8257 | C | ALA C 215 | -4.717 | 53.514 | 44.660 | 1.00 | 15.95 | C |
| ATOM | 8258 | O | ALA C 215 | -5.139 | 53.525 | 45.825 | 1.00 | 17.89 | O |
| ATOM | 8259 | CB | ALA C 215 | -2.194 | 53.437 | 44.369 | 1.00 | 16.33 | C |
| ATOM | 8260 | N | ALA C 216 | -5.207 | 54.310 | 43.711 | 1.00 | 15.87 | N |
| ATOM | 8261 | CA | ALA C 216 | -6.354 | 55.169 | 44.016 | 1.00 | 18.16 | C |
| ATOM | 8262 | C | ALA C 216 | -7.583 | 54.272 | 44.253 | 1.00 | 18.69 | C |
| ATOM | 8263 | O | ALA C 216 | -8.339 | 54.513 | 45.176 | 1.00 | 19.35 | O |
| ATOM | 8264 | CB | ALA C 216 | -6.636 | 56.178 | 42.858 | 1.00 | 15.64 | C |
| ATOM | 8265 | N | ASP C 217 | -7.768 | 53.247 | 43.420 | 1.00 | 19.71 | N |
| ATOM | 8266 | CA | ASP C 217 | -8.921 | 52.366 | 43.612 | 1.00 | 20.23 | C |
| ATOM | 8267 | C | ASP C 217 | -8.847 | 51.648 | 44.963 | 1.00 | 20.99 | C |
| ATOM | 8268 | O | ASP C 217 | -9.851 | 51.572 | 45.660 | 1.00 | 19.88 | O |
| ATOM | 8269 | CB | ASP C 217 | -9.049 | 51.344 | 42.477 | 1.00 | 18.97 | C |
| ATOM | 8270 | CG | ASP C 217 | -9.495 | 51.965 | 41.157 | 1.00 | 18.64 | C |
| ATOM | 8271 | OD1 | ASP C 217 | -10.112 | 53.068 | 41.127 | 1.00 | 20.50 | O |
| ATOM | 8272 | OD2 | ASP C 217 | -9.226 | 51.324 | 40.115 | 1.00 | 20.76 | O |
| ATOM | 8273 | N | VAL C 218 | -7.663 | 51.135 | 45.348 | 1.00 | 18.67 | N |
| ATOM | 8274 | CA | VAL C 218 | -7.525 | 50.475 | 46.663 | 1.00 | 19.12 | C |
| ATOM | 8275 | C | VAL C 218 | -7.796 | 51.471 | 47.809 | 1.00 | 18.90 | C |
| ATOM | 8276 | O | VAL C 218 | -8.324 | 51.092 | 48.853 | 1.00 | 18.62 | O |
| ATOM | 8277 | CB | VAL C 218 | -6.096 | 49.841 | 46.839 | 1.00 | 16.34 | C |
| ATOM | 8278 | CG1 | VAL C 218 | -5.907 | 49.277 | 48.267 | 1.00 | 17.06 | C |
| ATOM | 8279 | CG2 | VAL C 218 | -5.919 | 48.719 | 45.845 | 1.00 | 13.64 | C |
| ATOM | 8280 | N | ALA C 219 | -7.431 | 52.739 | 47.596 | 1.00 | 19.80 | N |
| ATOM | 8281 | CA | ALA C 219 | -7.623 | 53.799 | 48.592 | 1.00 | 21.44 | C |
| ATOM | 8282 | C | ALA C 219 | -9.051 | 54.346 | 48.519 | 1.00 | 21.81 | C |
| ATOM | 8283 | O | ALA C 219 | -9.416 | 55.231 | 49.265 | 1.00 | 23.09 | O |
| ATOM | 8284 | CB | ALA C 219 | -6.639 | 54.947 | 48.342 | 1.00 | 20.55 | C |
| ATOM | 8285 | N | ASP C 220 | -9.832 | 53.830 | 47.579 | 1.00 | 23.98 | N |
| ATOM | 8286 | CA | ASP C 220 | -11.228 | 54.228 | 47.408 | 1.00 | 23.59 | C |
| ATOM | 8287 | C | ASP C 220 | -11.484 | 55.708 | 47.131 | 1.00 | 24.05 | C |
| ATOM | 8288 | O | ASP C 220 | -12.389 | 56.307 | 47.708 | 1.00 | 25.29 | O |
| ATOM | 8289 | CB | ASP C 220 | -12.020 | 53.763 | 48.635 | 1.00 | 26.08 | C |
| ATOM | 8290 | CG | ASP C 220 | -13.535 | 53.802 | 48.416 | 1.00 | 29.06 | C |
| ATOM | 8291 | OD1 | ASP C 220 | -13.983 | 53.587 | 47.263 | 1.00 | 31.25 | O |
| ATOM | 8292 | OD2 | ASP C 220 | -14.265 | 54.032 | 49.403 | 1.00 | 29.26 | O |
| ATOM | 8293 | N | VAL C 221 | -10.695 | 56.304 | 46.244 | 1.00 | 21.92 | N |
| ATOM | 8294 | CA | VAL C 221 | -10.873 | 57.697 | 45.890 | 1.00 | 20.47 | C |
| ATOM | 8295 | C | VAL C 221 | -10.635 | 57.872 | 44.402 | 1.00 | 21.24 | C |
| ATOM | 8296 | O | VAL C 221 | -9.740 | 57.240 | 43.827 | 1.00 | 22.44 | O |
| ATOM | 8297 | CB | VAL C 221 | -9.948 | 58.629 | 46.700 | 1.00 | 19.62 | C |
| ATOM | 8298 | CG1 | VAL C 221 | -10.364 | 58.616 | 48.162 | 1.00 | 16.46 | C |
| ATOM | 8299 | CG2 | VAL C 221 | -8.471 | 58.206 | 46.514 | 1.00 | 18.75 | C |
| ATOM | 8300 | N | PRO C 222 | -11.415 | 58.757 | 43.756 | 1.00 | 20.78 | N |
| ATOM | 8301 | CA | PRO C 222 | -11.380 | 59.072 | 42.323 | 1.00 | 20.61 | C |
| ATOM | 8302 | C | PRO C 222 | -10.280 | 60.005 | 41.845 | 1.00 | 19.63 | C |
| ATOM | 8303 | O | PRO C 222 | -10.522 | 60.876 | 41.034 | 1.00 | 19.85 | O |
| ATOM | 8304 | CB | PRO C 222 | -12.788 | 59.642 | 42.071 | 1.00 | 19.95 | C |
| ATOM | 8305 | CG | PRO C 222 | -13.025 | 60.419 | 43.291 | 1.00 | 19.23 | C |
| ATOM | 8306 | CD | PRO C 222 | -12.544 | 59.462 | 44.404 | 1.00 | 21.41 | C |
| ATOM | 8307 | N | THR C 223 | -9.066 | 59.792 | 42.357 | 1.00 | 18.84 | N |
| ATOM | 8308 | CA | THR C 223 | -7.925 | 60.623 | 42.015 | 1.00 | 16.05 | C |
| ATOM | 8309 | C | THR C 223 | -7.751 | 60.828 | 40.513 | 1.00 | 18.26 | C |
| ATOM | 8310 | O | THR C 223 | -7.837 | 59.880 | 39.729 | 1.00 | 18.43 | O |
| ATOM | 8311 | CB | THR C 223 | -6.580 | 59.998 | 42.545 | 1.00 | 15.11 | C |
| ATOM | 8312 | OG1 | THR C 223 | -6.730 | 59.593 | 43.899 | 1.00 | 14.85 | O |
| ATOM | 8313 | CG2 | THR C 223 | -5.410 | 61.034 | 42.417 | 1.00 | 15.72 | C |

| ATOM | 8314 | N   | VAL | C 224 | -7.507 | 62.064 | 40.121 | 1.00 | 18.00 | N |
| ATOM | 8315 | CA  | VAL | C 224 | -7.282 | 62.404 | 38.724 | 1.00 | 18.92 | C |
| ATOM | 8316 | C   | VAL | C 224 | -5.873 | 61.936 | 38.355 | 1.00 | 19.52 | C |
| ATOM | 8317 | O   | VAL | C 224 | -4.907 | 62.348 | 38.983 | 1.00 | 19.60 | O |
| ATOM | 8318 | CB  | VAL | C 224 | -7.376 | 63.909 | 38.542 | 1.00 | 18.66 | C |
| ATOM | 8319 | CG1 | VAL | C 224 | -7.070 | 64.294 | 37.081 | 1.00 | 19.96 | C |
| ATOM | 8320 | CG2 | VAL | C 224 | -8.805 | 64.376 | 38.943 | 1.00 | 19.57 | C |
| ATOM | 8321 | N   | VAL | C 225 | -5.765 | 61.079 | 37.344 | 1.00 | 18.86 | N |
| ATOM | 8322 | CA  | VAL | C 225 | -4.459 | 60.542 | 36.923 | 1.00 | 18.50 | C |
| ATOM | 8323 | C   | VAL | C 225 | -4.028 | 61.196 | 35.616 | 1.00 | 19.19 | C |
| ATOM | 8324 | O   | VAL | C 225 | -4.723 | 61.090 | 34.616 | 1.00 | 20.74 | O |
| ATOM | 8325 | CB  | VAL | C 225 | -4.546 | 59.007 | 36.723 | 1.00 | 14.76 | C |
| ATOM | 8326 | CG1 | VAL | C 225 | -3.278 | 58.503 | 35.999 | 1.00 | 18.97 | C |
| ATOM | 8327 | CG2 | VAL | C 225 | -4.755 | 58.325 | 38.055 | 1.00 | 17.19 | C |
| ATOM | 8328 | N   | ILE | C 226 | -2.870 | 61.876 | 35.626 | 1.00 | 19.75 | N |
| ATOM | 8329 | CA  | ILE | C 226 | -2.365 | 62.576 | 34.450 | 1.00 | 18.38 | C |
| ATOM | 8330 | C   | ILE | C 226 | -1.120 | 61.897 | 33.877 | 1.00 | 17.99 | C |
| ATOM | 8331 | O   | ILE | C 226 | -0.224 | 61.525 | 34.634 | 1.00 | 16.82 | O |
| ATOM | 8332 | CB  | ILE | C 226 | -2.011 | 64.024 | 34.838 | 1.00 | 17.29 | C |
| ATOM | 8333 | CG1 | ILE | C 226 | -3.261 | 64.711 | 35.369 | 1.00 | 19.70 | C |
| ATOM | 8334 | CG2 | ILE | C 226 | -1.419 | 64.754 | 33.666 | 1.00 | 20.02 | C |
| ATOM | 8335 | CD1 | ILE | C 226 | -3.022 | 66.009 | 36.062 | 1.00 | 25.39 | C |
| ATOM | 8336 | N   | ALA | C 227 | -1.079 | 61.731 | 32.550 | 1.00 | 17.20 | N |
| ATOM | 8337 | CA  | ALA | C 227 | 0.056 | 61.112 | 31.897 | 1.00 | 19.86 | C |
| ATOM | 8338 | C   | ALA | C 227 | 0.850 | 62.154 | 31.154 | 1.00 | 20.40 | C |
| ATOM | 8339 | O   | ALA | C 227 | 0.302 | 62.937 | 30.374 | 1.00 | 21.07 | O |
| ATOM | 8340 | CB  | ALA | C 227 | -0.388 | 60.005 | 30.917 | 1.00 | 18.82 | C |
| ATOM | 8341 | N   | ARG | C 228 | 2.149 | 62.144 | 31.386 | 1.00 | 20.11 | N |
| ATOM | 8342 | CA  | ARG | C 228 | 3.055 | 63.075 | 30.723 | 1.00 | 18.72 | C |
| ATOM | 8343 | C   | ARG | C 228 | 3.995 | 62.296 | 29.853 | 1.00 | 18.88 | C |
| ATOM | 8344 | O   | ARG | C 228 | 4.416 | 61.193 | 30.223 | 1.00 | 21.38 | O |
| ATOM | 8345 | CB  | ARG | C 228 | 3.861 | 63.873 | 31.773 | 1.00 | 18.48 | C |
| ATOM | 8346 | CG  | ARG | C 228 | 5.134 | 64.528 | 31.208 | 1.00 | 18.66 | C |
| ATOM | 8347 | CD  | ARG | C 228 | 5.823 | 65.408 | 32.287 | 1.00 | 19.35 | C |
| ATOM | 8348 | NE  | ARG | C 228 | 7.267 | 65.431 | 32.057 | 1.00 | 20.04 | N |
| ATOM | 8349 | CZ  | ARG | C 228 | 8.149 | 66.186 | 32.702 | 1.00 | 21.52 | C |
| ATOM | 8350 | NH1 | ARG | C 228 | 7.753 | 67.018 | 33.659 | 1.00 | 20.53 | N |
| ATOM | 8351 | NH2 | ARG | C 228 | 9.438 | 66.120 | 32.370 | 1.00 | 18.85 | N |
| ATOM | 8352 | N   | THR | C 229 | 4.294 | 62.826 | 28.666 | 1.00 | 18.33 | N |
| ATOM | 8353 | CA  | THR | C 229 | 5.245 | 62.179 | 27.774 | 1.00 | 19.08 | C |
| ATOM | 8354 | C   | THR | C 229 | 6.376 | 63.150 | 27.503 | 1.00 | 17.35 | C |
| ATOM | 8355 | O   | THR | C 229 | 6.150 | 64.338 | 27.267 | 1.00 | 19.14 | O |
| ATOM | 8356 | CB  | THR | C 229 | 4.657 | 61.780 | 26.429 | 1.00 | 17.44 | C |
| ATOM | 8357 | OG1 | THR | C 229 | 5.673 | 61.129 | 25.663 | 1.00 | 16.39 | O |
| ATOM | 8358 | CG2 | THR | C 229 | 4.230 | 63.011 | 25.634 | 1.00 | 21.72 | C |
| ATOM | 8359 | N   | ASP | C 230 | 7.586 | 62.626 | 27.505 | 1.00 | 17.79 | N |
| ATOM | 8360 | CA  | ASP | C 230 | 8.774 | 63.419 | 27.312 | 1.00 | 18.78 | C |
| ATOM | 8361 | C   | ASP | C 230 | 9.418 | 63.132 | 25.982 | 1.00 | 20.46 | C |
| ATOM | 8362 | O   | ASP | C 230 | 10.594 | 63.403 | 25.804 | 1.00 | 20.50 | O |
| ATOM | 8363 | CB  | ASP | C 230 | 9.769 | 63.094 | 28.438 | 1.00 | 20.79 | C |
| ATOM | 8364 | CG  | ASP | C 230 | 9.505 | 63.918 | 29.675 | 1.00 | 20.65 | C |
| ATOM | 8365 | OD1 | ASP | C 230 | 9.952 | 65.084 | 29.683 | 1.00 | 20.13 | O |
| ATOM | 8366 | OD2 | ASP | C 230 | 8.837 | 63.437 | 30.612 | 1.00 | 18.66 | O |
| ATOM | 8367 | N   | ALA | C 231 | 8.646 | 62.607 | 25.038 | 1.00 | 18.29 | N |
| ATOM | 8368 | CA  | ALA | C 231 | 9.216 | 62.208 | 23.759 | 1.00 | 20.06 | C |
| ATOM | 8369 | C   | ALA | C 231 | 9.496 | 63.317 | 22.738 | 1.00 | 21.11 | C |
| ATOM | 8370 | O   | ALA | C 231 | 10.018 | 63.050 | 21.665 | 1.00 | 22.12 | O |
| ATOM | 8371 | CB  | ALA | C 231 | 8.328 | 61.094 | 23.112 | 1.00 | 17.48 | C |
| ATOM | 8372 | N   | GLU | C 232 | 9.186 | 64.555 | 23.082 | 1.00 | 23.49 | N |
| ATOM | 8373 | CA  | GLU | C 232 | 9.397 | 65.666 | 22.167 | 1.00 | 25.18 | C |
| ATOM | 8374 | C   | GLU | C 232 | 10.896 | 65.905 | 22.022 | 1.00 | 24.88 | C |
| ATOM | 8375 | O   | GLU | C 232 | 11.399 | 66.049 | 20.912 | 1.00 | 25.24 | O |
| ATOM | 8376 | CB  | GLU | C 232 | 8.674 | 66.908 | 22.697 | 1.00 | 27.44 | C |
| ATOM | 8377 | CG  | GLU | C 232 | 8.368 | 67.983 | 21.643 | 1.00 | 31.40 | C |
| ATOM | 8378 | CD  | GLU | C 232 | 9.554 | 68.890 | 21.364 | 1.00 | 34.84 | C |
| ATOM | 8379 | OE1 | GLU | C 232 | 10.112 | 69.445 | 22.332 | 1.00 | 34.52 | O |
| ATOM | 8380 | OE2 | GLU | C 232 | 9.933 | 69.047 | 20.177 | 1.00 | 36.99 | O |
| ATOM | 8381 | N   | ALA | C 233 | 11.610 | 65.868 | 23.142 | 1.00 | 23.64 | N |
| ATOM | 8382 | CA  | ALA | C 233 | 13.046 | 66.097 | 23.158 | 1.00 | 23.15 | C |
| ATOM | 8383 | C   | ALA | C 233 | 13.919 | 64.907 | 23.488 | 1.00 | 22.10 | C |
| ATOM | 8384 | O   | ALA | C 233 | 15.081 | 64.895 | 23.109 | 1.00 | 20.79 | O |
| ATOM | 8385 | CB  | ALA | C 233 | 13.374 | 67.228 | 24.135 | 1.00 | 22.74 | C |
| ATOM | 8386 | N   | ALA | C 234 | 13.402 | 63.897 | 24.199 | 1.00 | 22.65 | N |
| ATOM | 8387 | CA  | ALA | C 234 | 14.267 | 62.760 | 24.533 | 1.00 | 22.14 | C |
| ATOM | 8388 | C   | ALA | C 234 | 14.799 | 62.047 | 23.299 | 1.00 | 22.93 | C |
| ATOM | 8389 | O   | ALA | C 234 | 14.047 | 61.778 | 22.366 | 1.00 | 22.75 | O |
| ATOM | 8390 | CB  | ALA | C 234 | 13.521 | 61.746 | 25.430 | 1.00 | 18.34 | C |
| ATOM | 8391 | N   | THR | C 235 | 16.086 | 61.717 | 23.287 | 1.00 | 21.66 | N |
| ATOM | 8392 | CA  | THR | C 235 | 16.614 | 60.998 | 22.140 | 1.00 | 23.00 | C |
| ATOM | 8393 | C   | THR | C 235 | 17.175 | 59.631 | 22.559 | 1.00 | 21.58 | C |

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ATOM   8394  O    THR C 235      17.944  59.008  21.828  1.00 22.14           O
ATOM   8395  CB   THR C 235      17.703  61.812  21.441  1.00 26.06           C
ATOM   8396  OG1  THR C 235      18.831  61.956  22.318  1.00 27.24           O
ATOM   8397  CG2  THR C 235      17.156  63.202  21.088  1.00 26.76           C
ATOM   8398  N    LEU C 236      16.781  59.166  23.747  1.00 20.28           N
ATOM   8399  CA   LEU C 236      17.217  57.863  24.253  1.00 19.18           C
ATOM   8400  C    LEU C 236      16.019  57.117  24.831  1.00 19.14           C
ATOM   8401  O    LEU C 236      15.082  57.755  25.293  1.00 18.36           O
ATOM   8402  CB   LEU C 236      18.246  58.015  25.380  1.00 20.09           C
ATOM   8403  CG   LEU C 236      19.604  58.597  24.953  1.00 21.98           C
ATOM   8404  CD1  LEU C 236      20.451  58.901  26.176  1.00 23.83           C
ATOM   8405  CD2  LEU C 236      20.317  57.621  24.046  1.00 21.72           C
ATOM   8406  N    ILE C 237      16.075  55.782  24.796  1.00 18.30           N
ATOM   8407  CA   ILE C 237      15.019  54.929  25.362  1.00 17.69           C
ATOM   8408  C    ILE C 237      15.738  53.689  25.902  1.00 16.15           C
ATOM   8409  O    ILE C 237      16.754  53.269  25.361  1.00 16.73           O
ATOM   8410  CB   ILE C 237      13.951  54.544  24.299  1.00 17.81           C
ATOM   8411  CG1  ILE C 237      12.736  53.912  24.990  1.00 19.31           C
ATOM   8412  CG2  ILE C 237      14.568  53.648  23.236  1.00 15.55           C
ATOM   8413  CD1  ILE C 237      11.652  53.422  24.023  1.00 16.79           C
ATOM   8414  N    THR C 238      15.228  53.116  26.982  1.00 16.00           N
ATOM   8415  CA   THR C 238      15.880  51.971  27.600  1.00 17.13           C
ATOM   8416  C    THR C 238      15.867  50.684  26.799  1.00 18.61           C
ATOM   8417  O    THR C 238      16.807  49.884  26.871  1.00 17.63           O
ATOM   8418  CB   THR C 238      15.249  51.679  29.014  1.00 17.37           C
ATOM   8419  OG1  THR C 238      13.832  51.488  28.872  1.00 17.99           O
ATOM   8420  CG2  THR C 238      15.424  52.862  29.939  1.00 16.55           C
ATOM   8421  N    SER C 239      14.807  50.465  26.033  1.00 19.02           N
ATOM   8422  CA   SER C 239      14.677  49.211  25.306  1.00 20.22           C
ATOM   8423  C    SER C 239      13.833  49.370  24.048  1.00 20.76           C
ATOM   8424  O    SER C 239      13.040  50.308  23.941  1.00 20.72           O
ATOM   8425  CB   SER C 239      13.999  48.189  26.234  1.00 19.64           C
ATOM   8426  OG   SER C 239      13.818  46.943  25.583  1.00 20.57           O
ATOM   8427  N    ASP C 240      13.985  48.429  23.118  1.00 21.21           N
ATOM   8428  CA   ASP C 240      13.215  48.458  21.888  1.00 21.38           C
ATOM   8429  C    ASP C 240      12.196  47.322  21.853  1.00 20.93           C
ATOM   8430  O    ASP C 240      11.715  46.942  20.784  1.00 22.21           O
ATOM   8431  CB   ASP C 240      14.154  48.375  20.676  1.00 22.10           C
ATOM   8432  CG   ASP C 240      14.855  47.038  20.549  1.00 25.22           C
ATOM   8433  OD1  ASP C 240      15.019  46.314  21.551  1.00 24.76           O
ATOM   8434  OD2  ASP C 240      15.264  46.698  19.415  1.00 29.04           O
ATOM   8435  N    VAL C 241      11.856  46.784  23.022  1.00 21.56           N
ATOM   8436  CA   VAL C 241      10.906  45.667  23.119  1.00 21.96           C
ATOM   8437  C    VAL C 241       9.485  45.984  22.594  1.00 21.59           C
ATOM   8438  O    VAL C 241       8.787  45.109  22.054  1.00 21.16           O
ATOM   8439  CB   VAL C 241      10.758  45.206  24.611  1.00 23.24           C
ATOM   8440  CG1  VAL C 241      10.205  46.359  25.448  1.00 26.05           C
ATOM   8441  CG2  VAL C 241       9.824  43.996  24.738  1.00 26.71           C
ATOM   8442  N    ASP C 242       9.046  47.212  22.789  1.00 20.43           N
ATOM   8443  CA   ASP C 242       7.690  47.588  22.394  1.00 21.33           C
ATOM   8444  C    ASP C 242       7.543  47.952  20.909  1.00 21.27           C
ATOM   8445  O    ASP C 242       8.124  48.913  20.428  1.00 20.23           O
ATOM   8446  CB   ASP C 242       7.215  48.723  23.285  1.00 20.86           C
ATOM   8447  CG   ASP C 242       5.677  48.875  23.298  1.00 23.92           C
ATOM   8448  OD1  ASP C 242       5.056  48.939  22.216  1.00 21.92           O
ATOM   8449  OD2  ASP C 242       5.089  48.969  24.401  1.00 22.16           O
ATOM   8450  N    GLU C 243       6.735  47.178  20.192  1.00 22.06           N
ATOM   8451  CA   GLU C 243       6.537  47.432  18.773  1.00 22.35           C
ATOM   8452  C    GLU C 243       6.004  48.832  18.478  1.00 20.26           C
ATOM   8453  O    GLU C 243       6.172  49.325  17.362  1.00 17.77           O
ATOM   8454  CB   GLU C 243       5.600  46.376  18.155  1.00 25.75           C
ATOM   8455  CG   GLU C 243       6.064  44.953  18.419  1.00 31.99           C
ATOM   8456  CD   GLU C 243       5.384  43.888  17.543  1.00 36.80           C
ATOM   8457  OE1  GLU C 243       4.347  44.185  16.893  1.00 37.70           O
ATOM   8458  OE2  GLU C 243       5.911  42.743  17.519  1.00 38.93           O
ATOM   8459  N    ARG C 244       5.352  49.472  19.439  1.00 19.95           N
ATOM   8460  CA   ARG C 244       4.850  50.834  19.200  1.00 18.97           C
ATOM   8461  C    ARG C 244       5.985  51.841  19.232  1.00 18.84           C
ATOM   8462  O    ARG C 244       5.844  52.971  18.729  1.00 17.77           O
ATOM   8463  CB   ARG C 244       3.840  51.250  20.252  1.00 19.92           C
ATOM   8464  CG   ARG C 244       2.531  50.529  20.166  1.00 19.75           C
ATOM   8465  CD   ARG C 244       1.765  50.765  21.428  1.00 20.30           C
ATOM   8466  NE   ARG C 244       2.377  50.014  22.514  1.00 19.89           N
ATOM   8467  CZ   ARG C 244       1.725  49.657  23.613  1.00 22.03           C
ATOM   8468  NH1  ARG C 244       0.446  50.008  23.755  1.00 21.47           N
ATOM   8469  NH2  ARG C 244       2.328  48.915  24.547  1.00 20.91           N
ATOM   8470  N    ASP C 245       7.104  51.441  19.836  1.00 18.91           N
ATOM   8471  CA   ASP C 245       8.270  52.336  19.942  1.00 18.54           C
ATOM   8472  C    ASP C 245       9.284  52.097  18.813  1.00 19.87           C
ATOM   8473  O    ASP C 245      10.041  53.002  18.419  1.00 18.59           O
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| ATOM | 8474 | CB  | ASP | C | 245 | 8.996  | 52.136 | 21.287 | 1.00 | 15.99 | C |
| ATOM | 8475 | CG  | ASP | C | 245 | 8.130  | 52.471 | 22.491 | 1.00 | 13.69 | C |
| ATOM | 8476 | OD1 | ASP | C | 245 | 7.330  | 53.437 | 22.413 | 1.00 | 17.52 | O |
| ATOM | 8477 | OD2 | ASP | C | 245 | 8.262  | 51.804 | 23.541 | 1.00 | 17.16 | O |
| ATOM | 8478 | N   | GLN | C | 246 | 9.300  | 50.874 | 18.304 | 1.00 | 20.26 | N |
| ATOM | 8479 | CA  | GLN | C | 246 | 10.250 | 50.475 | 17.282 | 1.00 | 22.13 | C |
| ATOM | 8480 | C   | GLN | C | 246 | 10.347 | 51.360 | 16.034 | 1.00 | 21.97 | C |
| ATOM | 8481 | O   | GLN | C | 246 | 11.427 | 51.529 | 15.498 | 1.00 | 21.74 | O |
| ATOM | 8482 | CB  | GLN | C | 246 | 9.991  | 49.010 | 16.898 | 1.00 | 23.16 | C |
| ATOM | 8483 | CG  | GLN | C | 246 | 10.321 | 48.038 | 18.026 | 1.00 | 22.71 | C |
| ATOM | 8484 | CD  | GLN | C | 246 | 9.865  | 46.633 | 17.756 | 1.00 | 24.09 | C |
| ATOM | 8485 | OE1 | GLN | C | 246 | 9.518  | 46.288 | 16.629 | 1.00 | 23.25 | O |
| ATOM | 8486 | NE2 | GLN | C | 246 | 9.880  | 45.800 | 18.785 | 1.00 | 22.87 | N |
| ATOM | 8487 | N   | PRO | C | 247 | 9.240  | 51.989 | 15.595 | 1.00 | 22.20 | N |
| ATOM | 8488 | CA  | PRO | C | 247 | 9.404  | 52.816 | 14.390 | 1.00 | 22.72 | C |
| ATOM | 8489 | C   | PRO | C | 247 | 10.310 | 54.028 | 14.591 | 1.00 | 24.11 | C |
| ATOM | 8490 | O   | PRO | C | 247 | 10.730 | 54.672 | 13.621 | 1.00 | 24.18 | O |
| ATOM | 8491 | CB  | PRO | C | 247 | 7.975  | 53.253 | 14.060 | 1.00 | 23.33 | C |
| ATOM | 8492 | CG  | PRO | C | 247 | 7.103  | 52.134 | 14.653 | 1.00 | 22.82 | C |
| ATOM | 8493 | CD  | PRO | C | 247 | 7.816  | 51.883 | 15.979 | 1.00 | 21.71 | C |
| ATOM | 8494 | N   | PHE | C | 248 | 10.607 | 54.354 | 15.840 | 1.00 | 22.57 | N |
| ATOM | 8495 | CA  | PHE | C | 248 | 11.433 | 55.516 | 16.105 | 1.00 | 22.85 | C |
| ATOM | 8496 | C   | PHE | C | 248 | 12.841 | 55.122 | 16.536 | 1.00 | 24.78 | C |
| ATOM | 8497 | O   | PHE | C | 248 | 13.747 | 55.962 | 16.597 | 1.00 | 25.01 | O |
| ATOM | 8498 | CB  | PHE | C | 248 | 10.750 | 56.380 | 17.175 | 1.00 | 21.43 | C |
| ATOM | 8499 | CG  | PHE | C | 248 | 9.357  | 56.820 | 16.794 | 1.00 | 24.90 | C |
| ATOM | 8500 | CD1 | PHE | C | 248 | 9.155  | 57.805 | 15.826 | 1.00 | 24.36 | C |
| ATOM | 8501 | CD2 | PHE | C | 248 | 8.249  | 56.235 | 17.386 | 1.00 | 22.84 | C |
| ATOM | 8502 | CE1 | PHE | C | 248 | 7.853  | 58.184 | 15.465 | 1.00 | 26.06 | C |
| ATOM | 8503 | CE2 | PHE | C | 248 | 6.964  | 56.595 | 17.045 | 1.00 | 24.14 | C |
| ATOM | 8504 | CZ  | PHE | C | 248 | 6.753  | 57.570 | 16.082 | 1.00 | 24.58 | C |
| ATOM | 8505 | N   | ILE | C | 249 | 13.031 | 53.845 | 16.838 | 1.00 | 24.76 | N |
| ATOM | 8506 | CA  | ILE | C | 249 | 14.334 | 53.355 | 17.274 | 1.00 | 26.09 | C |
| ATOM | 8507 | C   | ILE | C | 249 | 15.284 | 53.291 | 16.085 | 1.00 | 26.16 | C |
| ATOM | 8508 | O   | ILE | C | 249 | 14.977 | 52.673 | 15.058 | 1.00 | 24.92 | O |
| ATOM | 8509 | CB  | ILE | C | 249 | 14.233 | 51.933 | 17.904 | 1.00 | 26.06 | C |
| ATOM | 8510 | CG1 | ILE | C | 249 | 13.396 | 51.988 | 19.175 | 1.00 | 30.72 | C |
| ATOM | 8511 | CG2 | ILE | C | 249 | 15.619 | 51.397 | 18.232 | 1.00 | 27.85 | C |
| ATOM | 8512 | CD1 | ILE | C | 249 | 13.837 | 53.016 | 20.096 | 1.00 | 31.53 | C |
| ATOM | 8513 | N   | THR | C | 250 | 16.452 | 53.897 | 16.230 | 1.00 | 25.45 | N |
| ATOM | 8514 | CA  | THR | C | 250 | 17.388 | 53.909 | 15.124 | 1.00 | 24.89 | C |
| ATOM | 8515 | C   | THR | C | 250 | 18.318 | 52.714 | 15.052 | 1.00 | 25.61 | C |
| ATOM | 8516 | O   | THR | C | 250 | 18.987 | 52.548 | 14.037 | 1.00 | 25.83 | O |
| ATOM | 8517 | CB  | THR | C | 250 | 18.288 | 55.156 | 15.156 | 1.00 | 24.17 | C |
| ATOM | 8518 | OG1 | THR | C | 250 | 19.250 | 55.002 | 16.201 | 1.00 | 23.76 | O |
| ATOM | 8519 | CG2 | THR | C | 250 | 17.475 | 56.402 | 15.387 | 1.00 | 24.20 | C |
| ATOM | 8520 | N   | GLY | C | 251 | 18.389 | 51.895 | 16.102 | 1.00 | 24.02 | N |
| ATOM | 8521 | CA  | GLY | C | 251 | 19.309 | 50.770 | 16.072 | 1.00 | 23.48 | C |
| ATOM | 8522 | C   | GLY | C | 251 | 20.638 | 51.102 | 16.747 | 1.00 | 24.07 | C |
| ATOM | 8523 | O   | GLY | C | 251 | 21.314 | 50.216 | 17.247 | 1.00 | 23.92 | O |
| ATOM | 8524 | N   | GLU | C | 252 | 21.004 | 52.382 | 16.766 | 1.00 | 22.99 | N |
| ATOM | 8525 | CA  | GLU | C | 252 | 22.232 | 52.847 | 17.408 | 1.00 | 23.71 | C |
| ATOM | 8526 | C   | GLU | C | 252 | 22.076 | 52.804 | 18.944 | 1.00 | 22.99 | C |
| ATOM | 8527 | O   | GLU | C | 252 | 21.031 | 53.182 | 19.480 | 1.00 | 22.32 | O |
| ATOM | 8528 | CB  | GLU | C | 252 | 22.492 | 54.290 | 16.975 | 1.00 | 23.95 | C |
| ATOM | 8529 | CG  | GLU | C | 252 | 23.728 | 54.889 | 17.570 | 1.00 | 25.74 | C |
| ATOM | 8530 | CD  | GLU | C | 252 | 24.057 | 56.255 | 16.985 | 1.00 | 27.46 | C |
| ATOM | 8531 | OE1 | GLU | C | 252 | 23.468 | 56.666 | 15.956 | 1.00 | 27.25 | O |
| ATOM | 8532 | OE2 | GLU | C | 252 | 24.925 | 56.912 | 17.562 | 1.00 | 25.74 | O |
| ATOM | 8533 | N   | ARG | C | 253 | 23.120 | 52.364 | 19.636 | 1.00 | 24.48 | N |
| ATOM | 8534 | CA  | ARG | C | 253 | 23.117 | 52.273 | 21.104 | 1.00 | 26.68 | C |
| ATOM | 8535 | C   | ARG | C | 253 | 24.283 | 53.057 | 21.719 | 1.00 | 28.19 | C |
| ATOM | 8536 | O   | ARG | C | 253 | 25.346 | 53.205 | 21.098 | 1.00 | 28.51 | O |
| ATOM | 8537 | CB  | ARG | C | 253 | 23.278 | 50.828 | 21.528 | 1.00 | 28.03 | C |
| ATOM | 8538 | CG  | ARG | C | 253 | 22.357 | 49.918 | 20.810 | 1.00 | 31.58 | C |
| ATOM | 8539 | CD  | ARG | C | 253 | 21.263 | 49.552 | 21.730 | 1.00 | 32.65 | C |
| ATOM | 8540 | NE  | ARG | C | 253 | 21.643 | 48.505 | 22.660 | 1.00 | 34.43 | N |
| ATOM | 8541 | CZ  | ARG | C | 253 | 22.235 | 47.373 | 22.302 | 1.00 | 36.09 | C |
| ATOM | 8542 | NH1 | ARG | C | 253 | 22.535 | 47.168 | 21.022 | 1.00 | 37.99 | N |
| ATOM | 8543 | NH2 | ARG | C | 253 | 22.455 | 46.421 | 23.198 | 1.00 | 33.30 | N |
| ATOM | 8544 | N   | THR | C | 254 | 24.090 | 53.537 | 22.945 | 1.00 | 28.44 | N |
| ATOM | 8545 | CA  | THR | C | 254 | 25.146 | 54.270 | 23.635 | 1.00 | 27.58 | C |
| ATOM | 8546 | C   | THR | C | 254 | 25.939 | 53.243 | 24.406 | 1.00 | 27.62 | C |
| ATOM | 8547 | O   | THR | C | 254 | 25.560 | 52.073 | 24.451 | 1.00 | 28.36 | O |
| ATOM | 8548 | CB  | THR | C | 254 | 24.581 | 55.282 | 24.633 | 1.00 | 26.26 | C |
| ATOM | 8549 | OG1 | THR | C | 254 | 23.929 | 54.575 | 25.691 | 1.00 | 24.17 | O |
| ATOM | 8550 | CG2 | THR | C | 254 | 23.613 | 56.242 | 23.956 | 1.00 | 26.45 | C |
| ATOM | 8551 | N   | ARG | C | 255 | 27.027 | 53.669 | 25.042 | 1.00 | 30.08 | N |
| ATOM | 8552 | CA  | ARG | C | 255 | 27.856 | 52.728 | 25.805 | 1.00 | 30.65 | C |
| ATOM | 8553 | C   | ARG | C | 255 | 27.122 | 52.201 | 27.035 | 1.00 | 29.59 | C |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 8554 | O | ARG | C | 255 | 27.416 | 51.118 | 27.508 | 1.00 | 30.30 | O |
| ATOM | 8555 | CB | ARG | C | 255 | 29.178 | 53.394 | 26.225 | 1.00 | 33.91 | C |
| ATOM | 8556 | CG | ARG | C | 255 | 29.974 | 53.919 | 25.031 | 1.00 | 40.27 | C |
| ATOM | 8557 | CD | ARG | C | 255 | 31.357 | 54.452 | 25.417 | 1.00 | 45.25 | C |
| ATOM | 8558 | NE | ARG | C | 255 | 32.255 | 53.416 | 25.948 | 1.00 | 49.74 | N |
| ATOM | 8559 | CZ | ARG | C | 255 | 32.786 | 52.422 | 25.231 | 1.00 | 51.79 | C |
| ATOM | 8560 | NH1 | ARG | C | 255 | 32.517 | 52.310 | 23.930 | 1.00 | 52.53 | N |
| ATOM | 8561 | NH2 | ARG | C | 255 | 33.588 | 51.530 | 25.816 | 1.00 | 52.84 | N |
| ATOM | 8562 | N | GLU | C | 256 | 26.154 | 52.957 | 27.545 | 1.00 | 29.08 | N |
| ATOM | 8563 | CA | GLU | C | 256 | 25.412 | 52.496 | 28.719 | 1.00 | 27.87 | C |
| ATOM | 8564 | C | GLU | C | 256 | 24.412 | 51.437 | 28.306 | 1.00 | 28.41 | C |
| ATOM | 8565 | O | GLU | C | 256 | 23.895 | 50.697 | 29.137 | 1.00 | 29.61 | O |
| ATOM | 8566 | CB | GLU | C | 256 | 24.686 | 53.653 | 29.378 | 1.00 | 28.34 | C |
| ATOM | 8567 | CG | GLU | C | 256 | 25.625 | 54.740 | 29.856 | 1.00 | 30.26 | C |
| ATOM | 8568 | CD | GLU | C | 256 | 25.577 | 55.966 | 28.994 | 1.00 | 31.06 | C |
| ATOM | 8569 | OE1 | GLU | C | 256 | 25.440 | 55.813 | 27.749 | 1.00 | 31.30 | O |
| ATOM | 8570 | OE2 | GLU | C | 256 | 25.688 | 57.091 | 29.560 | 1.00 | 31.17 | O |
| ATOM | 8571 | N | GLY | C | 257 | 24.152 | 51.364 | 27.006 | 1.00 | 28.38 | N |
| ATOM | 8572 | CA | GLY | C | 257 | 23.207 | 50.394 | 26.485 | 1.00 | 26.04 | C |
| ATOM | 8573 | C | GLY | C | 257 | 21.853 | 50.991 | 26.123 | 1.00 | 24.96 | C |
| ATOM | 8574 | O | GLY | C | 257 | 20.925 | 50.234 | 25.806 | 1.00 | 26.50 | O |
| ATOM | 8575 | N | PHE | C | 258 | 21.720 | 52.321 | 26.158 | 1.00 | 23.26 | N |
| ATOM | 8576 | CA | PHE | C | 258 | 20.452 | 52.963 | 25.820 | 1.00 | 22.11 | C |
| ATOM | 8577 | C | PHE | C | 258 | 20.318 | 52.972 | 24.314 | 1.00 | 23.67 | C |
| ATOM | 8578 | O | PHE | C | 258 | 21.319 | 52.941 | 23.603 | 1.00 | 23.94 | O |
| ATOM | 8579 | CB | PHE | C | 258 | 20.414 | 54.400 | 26.317 | 1.00 | 21.83 | C |
| ATOM | 8580 | CG | PHE | C | 258 | 20.498 | 54.533 | 27.810 | 1.00 | 23.42 | C |
| ATOM | 8581 | CD1 | PHE | C | 258 | 19.737 | 53.716 | 28.632 | 1.00 | 23.49 | C |
| ATOM | 8582 | CD2 | PHE | C | 258 | 21.300 | 55.508 | 28.389 | 1.00 | 23.89 | C |
| ATOM | 8583 | CE1 | PHE | C | 258 | 19.770 | 53.866 | 30.023 | 1.00 | 24.63 | C |
| ATOM | 8584 | CE2 | PHE | C | 258 | 21.341 | 55.669 | 29.770 | 1.00 | 25.30 | C |
| ATOM | 8585 | CZ | PHE | C | 258 | 20.575 | 54.849 | 30.595 | 1.00 | 23.95 | C |
| ATOM | 8586 | N | TYR | C | 259 | 19.087 | 52.994 | 23.825 | 1.00 | 22.87 | N |
| ATOM | 8587 | CA | TYR | C | 259 | 18.849 | 53.039 | 22.387 | 1.00 | 21.83 | C |
| ATOM | 8588 | C | TYR | C | 259 | 18.542 | 54.451 | 21.914 | 1.00 | 22.11 | C |
| ATOM | 8589 | O | TYR | C | 259 | 17.711 | 55.155 | 22.526 | 1.00 | 21.62 | O |
| ATOM | 8590 | CB | TYR | C | 259 | 17.642 | 52.153 | 22.020 | 1.00 | 21.90 | C |
| ATOM | 8591 | CG | TYR | C | 259 | 17.870 | 50.684 | 22.193 | 1.00 | 21.30 | C |
| ATOM | 8592 | CD1 | TYR | C | 259 | 17.812 | 50.094 | 23.444 | 1.00 | 20.25 | C |
| ATOM | 8593 | CD2 | TYR | C | 259 | 18.137 | 49.864 | 21.086 | 1.00 | 23.65 | C |
| ATOM | 8594 | CE1 | TYR | C | 259 | 18.013 | 48.725 | 23.593 | 1.00 | 22.01 | C |
| ATOM | 8595 | CE2 | TYR | C | 259 | 18.337 | 48.511 | 21.227 | 1.00 | 23.81 | C |
| ATOM | 8596 | CZ | TYR | C | 259 | 18.276 | 47.940 | 22.483 | 1.00 | 24.19 | C |
| ATOM | 8597 | OH | TYR | C | 259 | 18.484 | 46.588 | 22.614 | 1.00 | 27.65 | O |
| ATOM | 8598 | N | ARG | C | 260 | 19.187 | 54.895 | 20.832 | 1.00 | 21.86 | N |
| ATOM | 8599 | CA | ARG | C | 260 | 18.855 | 56.202 | 20.300 | 1.00 | 22.74 | C |
| ATOM | 8600 | C | ARG | C | 260 | 17.461 | 56.071 | 19.637 | 1.00 | 23.03 | C |
| ATOM | 8601 | O | ARG | C | 260 | 17.113 | 55.031 | 19.059 | 1.00 | 22.13 | O |
| ATOM | 8602 | CB | ARG | C | 260 | 19.892 | 56.668 | 19.260 | 1.00 | 25.12 | C |
| ATOM | 8603 | CG | ARG | C | 260 | 21.214 | 57.120 | 19.851 | 1.00 | 26.93 | C |
| ATOM | 8604 | CD | ARG | C | 260 | 21.131 | 58.522 | 20.504 | 1.00 | 29.54 | C |
| ATOM | 8605 | NE | ARG | C | 260 | 22.360 | 58.808 | 21.259 | 1.00 | 30.64 | N |
| ATOM | 8606 | CZ | ARG | C | 260 | 22.474 | 59.720 | 22.227 | 1.00 | 32.83 | C |
| ATOM | 8607 | NH1 | ARG | C | 260 | 21.431 | 60.470 | 22.580 | 1.00 | 32.22 | N |
| ATOM | 8608 | NH2 | ARG | C | 260 | 23.627 | 59.848 | 22.888 | 1.00 | 31.81 | N |
| ATOM | 8609 | N | THR | C | 261 | 16.683 | 57.142 | 19.729 | 1.00 | 23.74 | N |
| ATOM | 8610 | CA | THR | C | 261 | 15.351 | 57.168 | 19.168 | 1.00 | 22.92 | C |
| ATOM | 8611 | C | THR | C | 261 | 15.039 | 58.579 | 18.641 | 1.00 | 24.06 | C |
| ATOM | 8612 | O | THR | C | 261 | 15.448 | 59.572 | 19.242 | 1.00 | 23.35 | O |
| ATOM | 8613 | CB | THR | C | 261 | 14.362 | 56.750 | 20.272 | 1.00 | 23.15 | C |
| ATOM | 8614 | OG1 | THR | C | 261 | 13.061 | 56.581 | 19.707 | 1.00 | 23.30 | O |
| ATOM | 8615 | CG2 | THR | C | 261 | 14.323 | 57.808 | 21.380 | 1.00 | 20.34 | C |
| ATOM | 8616 | N | LYS | C | 262 | 14.316 | 58.665 | 17.521 | 1.00 | 25.78 | N |
| ATOM | 8617 | CA | LYS | C | 262 | 13.942 | 59.943 | 16.917 | 1.00 | 26.73 | C |
| ATOM | 8618 | C, | LYS | C | 262 | 12.819 | 60.661 | 17.661 | 1.00 | 27.42 | C |
| ATOM | 8619 | O | LYS | C | 262 | 11.691 | 60.168 | 17.754 | 1.00 | 27.58 | O |
| ATOM | 8620 | CB | LYS | C | 262 | 13.557 | 59.730 | 15.444 | 1.00 | 29.93 | C |
| ATOM | 8621 | CG | LYS | C | 262 | 14.786 | 59.664 | 14.537 | 1.00 | 34.80 | C |
| ATOM | 8622 | CD | LYS | C | 262 | 14.433 | 59.334 | 13.098 | 1.00 | 39.38 | C |
| ATOM | 8623 | CE | LYS | C | 262 | 15.680 | 59.315 | 12.197 | 1.00 | 41.93 | C |
| ATOM | 8624 | NZ | LYS | C | 262 | 16.326 | 60.642 | 11.893 | 1.00 | 42.94 | N |
| ATOM | 8625 | N | ASN | C | 263 | 13.135 | 61.855 | 18.158 | 1.00 | 26.87 | N |
| ATOM | 8626 | CA | ASN | C | 263 | 12.225 | 62.676 | 18.952 | 1.00 | 26.35 | C |
| ATOM | 8627 | C | ASN | C | 263 | 11.304 | 63.570 | 18.140 | 1.00 | 26.22 | C |
| ATOM | 8628 | O | ASN | C | 263 | 11.502 | 63.740 | 16.951 | 1.00 | 28.37 | O |
| ATOM | 8629 | CB | ASN | C | 263 | 13.044 | 63.551 | 19.898 | 1.00 | 26.73 | C |
| ATOM | 8630 | CG | ASN | C | 263 | 13.958 | 64.495 | 19.146 | 1.00 | 28.29 | C |
| ATOM | 8631 | OD1 | ASN | C | 263 | 14.815 | 64.061 | 18.381 | 1.00 | 27.05 | O |
| ATOM | 8632 | ND2 | ASN | C | 263 | 13.762 | 65.784 | 19.340 | 1.00 | 28.52 | N |
| ATOM | 8633 | N | GLY | C | 264 | 10.297 | 64.158 | 18.791 | 1.00 | 26.90 | N |

| ATOM | 8634 | CA | GLY C 264 | 9.386 | 65.030 | 18.086 | 1.00 | 25.19 | C |
|------|------|-----|-----------|-------|--------|--------|------|-------|---|
| ATOM | 8635 | C | GLY C 264 | 7.935 | 64.883 | 18.456 | 1.00 | 26.16 | C |
| ATOM | 8636 | O | GLY C 264 | 7.557 | 64.098 | 19.311 | 1.00 | 24.69 | O |
| ATOM | 8637 | N | ILE C 265 | 7.093 | 65.654 | 17.799 | 1.00 | 26.23 | N |
| ATOM | 8638 | CA | ILE C 265 | 5.677 | 65.597 | 18.099 | 1.00 | 26.77 | C |
| ATOM | 8639 | C | ILE C 265 | 5.063 | 64.266 | 17.671 | 1.00 | 26.37 | C |
| ATOM | 8640 | O | ILE C 265 | 4.088 | 63.795 | 18.277 | 1.00 | 26.05 | O |
| ATOM | 8641 | CB | ILE C 265 | 4.943 | 66.747 | 17.414 | 1.00 | 27.23 | C |
| ATOM | 8642 | CG1 | ILE C 265 | 3.481 | 66.760 | 17.884 | 1.00 | 29.23 | C |
| ATOM | 8643 | CG2 | ILE C 265 | 5.082 | 66.593 | 15.882 | 1.00 | 27.97 | C |
| ATOM | 8644 | CD1 | ILE C 265 | 2.750 | 68.094 | 17.665 | 1.00 | 32.26 | C |
| ATOM | 8645 | N | GLU C 266 | 5.634 | 63.644 | 16.638 | 1.00 | 27.73 | N |
| ATOM | 8646 | CA | GLU C 266 | 5.096 | 62.371 | 16.165 | 1.00 | 28.03 | C |
| ATOM | 8647 | C | GLU C 266 | 5.128 | 61.274 | 17.246 | 1.00 | 25.94 | C |
| ATOM | 8648 | O | GLU C 266 | 4.099 | 60.659 | 17.536 | 1.00 | 23.98 | O |
| ATOM | 8649 | CB | GLU C 266 | 5.830 | 61.924 | 14.888 | 1.00 | 30.67 | C |
| ATOM | 8650 | CG | GLU C 266 | 5.647 | 60.462 | 14.566 | 1.00 | 36.96 | C |
| ATOM | 8651 | CD | GLU C 266 | 5.942 | 60.128 | 13.112 | 1.00 | 40.29 | C |
| ATOM | 8652 | OE1 | GLU C 266 | 6.756 | 60.862 | 12.506 | 1.00 | 42.58 | O |
| ATOM | 8653 | OE2 | GLU C 266 | 5.370 | 59.126 | 12.592 | 1.00 | 42.50 | O |
| ATOM | 8654 | N | PRO C 267 | 6.295 | 61.024 | 17.857 | 1.00 | 23.73 | N |
| ATOM | 8655 | CA | PRO C 267 | 6.195 | 59.962 | 18.867 | 1.00 | 24.81 | C |
| ATOM | 8656 | C | PRO C 267 | 5.382 | 60.381 | 20.114 | 1.00 | 22.46 | C |
| ATOM | 8657 | O | PRO C 267 | 4.956 | 59.528 | 20.892 | 1.00 | 21.48 | O |
| ATOM | 8658 | CB | PRO C 267 | 7.671 | 59.609 | 19.141 | 1.00 | 23.00 | C |
| ATOM | 8659 | CG | PRO C 267 | 8.402 | 60.864 | 18.797 | 1.00 | 23.32 | C |
| ATOM | 8660 | CD | PRO C 267 | 7.705 | 61.276 | 17.517 | 1.00 | 23.57 | C |
| ATOM | 8661 | N | CYS C 268 | 5.154 | 61.683 | 20.296 | 1.00 | 23.56 | N |
| ATOM | 8662 | CA | CYS C 268 | 4.357 | 62.153 | 21.435 | 1.00 | 22.29 | C |
| ATOM | 8663 | C | CYS C 268 | 2.878 | 61.855 | 21.154 | 1.00 | 23.54 | C |
| ATOM | 8664 | O | CYS C 268 | 2.108 | 61.476 | 22.069 | 1.00 | 20.53 | O |
| ATOM | 8665 | CB | CYS C 268 | 4.550 | 63.662 | 21.673 | 1.00 | 24.06 | C |
| ATOM | 8666 | SG | CYS C 268 | 6.172 | 64.154 | 22.337 | 1.00 | 23.73 | S |
| ATOM | 8667 | N | ILE C 269 | 2.472 | 62.034 | 19.891 | 1.00 | 21.63 | N |
| ATOM | 8668 | CA | ILE C 269 | 1.086 | 61.750 | 19.513 | 1.00 | 21.96 | C |
| ATOM | 8669 | C | ILE C 269 | 0.858 | 60.246 | 19.695 | 1.00 | 20.81 | C |
| ATOM | 8670 | O | ILE C 269 | -0.121 | 59.824 | 20.286 | 1.00 | 22.09 | O |
| ATOM | 8671 | CB | ILE C 269 | 0.794 | 62.174 | 18.027 | 1.00 | 22.92 | C |
| ATOM | 8672 | CG1 | ILE C 269 | 0.513 | 63.677 | 17.979 | 1.00 | 22.27 | C |
| ATOM | 8673 | CG2 | ILE C 269 | -0.419 | 61.367 | 17.448 | 1.00 | 23.03 | C |
| ATOM | 8674 | CD1 | ILE C 269 | 0.871 | 64.340 | 16.666 | 1.00 | 24.46 | C |
| ATOM | 8675 | N | ALA C 270 | 1.808 | 59.451 | 19.232 | 1.00 | 21.18 | N |
| ATOM | 8676 | CA | ALA C 270 | 1.711 | 57.989 | 19.348 | 1.00 | 21.18 | C |
| ATOM | 8677 | C | ALA C 270 | 1.599 | 57.552 | 20.812 | 1.00 | 20.66 | C |
| ATOM | 8678 | O | ALA C 270 | 0.725 | 56.770 | 21.167 | 1.00 | 20.18 | O |
| ATOM | 8679 | CB | ALA C 270 | 2.936 | 57.332 | 18.691 | 1.00 | 21.67 | C |
| ATOM | 8680 | N | ARG C 271 | 2.482 | 58.065 | 21.660 | 1.00 | 19.86 | N |
| ATOM | 8681 | CA | ARG C 271 | 2.441 | 57.712 | 23.085 | 1.00 | 20.23 | C |
| ATOM | 8682 | C | ARG C 271 | 1.130 | 58.219 | 23.731 | 1.00 | 21.49 | C |
| ATOM | 8683 | O | ARG C 271 | 0.444 | 57.482 | 24.449 | 1.00 | 22.74 | O |
| ATOM | 8684 | CB | ARG C 271 | 3.708 | 58.259 | 23.790 | 1.00 | 18.98 | C |
| ATOM | 8685 | CG | ARG C 271 | 4.934 | 57.388 | 23.528 | 1.00 | 17.58 | C |
| ATOM | 8686 | CD | ARG C 271 | 6.251 | 57.940 | 24.076 | 1.00 | 17.83 | C |
| ATOM | 8687 | NE | ARG C 271 | 7.339 | 56.984 | 23.870 | 1.00 | 16.16 | N |
| ATOM | 8688 | CZ | ARG C 271 | 7.830 | 56.191 | 24.823 | 1.00 | 17.57 | C |
| ATOM | 8689 | NH1 | ARG C 271 | 7.352 | 56.239 | 26.061 | 1.00 | 17.92 | N |
| ATOM | 8690 | NH2 | ARG C 271 | 8.805 | 55.336 | 24.530 | 1.00 | 19.22 | N |
| ATOM | 8691 | N | ALA C 272 | 0.737 | 59.453 | 23.437 | 1.00 | 20.29 | N |
| ATOM | 8692 | CA | ALA C 272 | -0.501 | 59.981 | 23.997 | 1.00 | 20.91 | C |
| ATOM | 8693 | C | ALA C 272 | -1.713 | 59.101 | 23.675 | 1.00 | 20.64 | C |
| ATOM | 8694 | O | ALA C 272 | -2.568 | 58.880 | 24.533 | 1.00 | 22.02 | O |
| ATOM | 8695 | CB | ALA C 272 | -0.744 | 61.400 | 23.476 | 1.00 | 20.68 | C |
| ATOM | 8696 | N | LYS C 273 | -1.796 | 58.621 | 22.436 | 1.00 | 22.11 | N |
| ATOM | 8697 | CA | LYS C 273 | -2.905 | 57.765 | 22.024 | 1.00 | 23.36 | C |
| ATOM | 8698 | C | LYS C 273 | -2.870 | 56.464 | 22.803 | 1.00 | 22.10 | C |
| ATOM | 8699 | O | LYS C 273 | -3.921 | 55.941 | 23.228 | 1.00 | 22.00 | O |
| ATOM | 8700 | CB | LYS C 273 | -2.835 | 57.484 | 20.512 | 1.00 | 25.59 | C |
| ATOM | 8701 | CG | LYS C 273 | -3.070 | 58.730 | 19.657 | 1.00 | 23.22 | C |
| ATOM | 8702 | CD | LYS C 273 | -3.073 | 58.410 | 18.164 | 1.00 | 27.26 | C |
| ATOM | 8703 | CE | LYS C 273 | -3.401 | 59.669 | 17.348 | 1.00 | 26.11 | C |
| ATOM | 8704 | NZ | LYS C 273 | -3.137 | 59.425 | 15.884 | 1.00 | 31.62 | N |
| ATOM | 8705 | N | ALA C 274 | -1.662 | 55.943 | 23.000 | 1.00 | 20.04 | N |
| ATOM | 8706 | CA | ALA C 274 | -1.504 | 54.699 | 23.745 | 1.00 | 20.06 | C |
| ATOM | 8707 | C | ALA C 274 | -1.886 | 54.910 | 25.203 | 1.00 | 19.35 | C |
| ATOM | 8708 | O | ALA C 274 | -2.458 | 54.015 | 25.837 | 1.00 | 17.97 | O |
| ATOM | 8709 | CB | ALA C 274 | -0.045 | 54.190 | 23.637 | 1.00 | 16.69 | C |
| ATOM | 8710 | N | TYR C 275 | -1.575 | 56.092 | 25.750 | 1.00 | 19.62 | N |
| ATOM | 8711 | CA | TYR C 275 | -1.894 | 56.379 | 27.157 | 1.00 | 18.74 | C |
| ATOM | 8712 | C | TYR C 275 | -3.338 | 56.811 | 27.404 | 1.00 | 19.75 | C |
| ATOM | 8713 | O | TYR C 275 | -3.853 | 56.656 | 28.515 | 1.00 | 16.41 | O |

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ATOM   8714  CB  TYR C 275    -1.013  57.509  27.726  1.00 19.02          C
ATOM   8715  CG  TYR C 275     0.485  57.327  27.588  1.00 18.05          C
ATOM   8716  CD1 TYR C 275     1.054  56.053  27.477  1.00 18.01          C
ATOM   8717  CD2 TYR C 275     1.335  58.428  27.571  1.00 17.14          C
ATOM   8718  CE1 TYR C 275     2.433  55.886  27.341  1.00 14.85          C
ATOM   8719  CE2 TYR C 275     2.719  58.270  27.450  1.00 16.26          C
ATOM   8720  CZ  TYR C 275     3.260  56.987  27.327  1.00 16.41          C
ATOM   8721  OH  TYR C 275     4.611  56.815  27.145  1.00 14.12          O
ATOM   8722  N   ALA C 276    -4.010  57.321  26.371  1.00 19.54          N
ATOM   8723  CA  ALA C 276    -5.359  57.843  26.569  1.00 20.08          C
ATOM   8724  C   ALA C 276    -6.349  57.005  27.365  1.00 20.86          C
ATOM   8725  O   ALA C 276    -7.035  57.547  28.226  1.00 23.36          O
ATOM   8726  CB  ALA C 276    -5.982  58.282  25.188  1.00 22.31          C
ATOM   8727  N   PRO C 277    -6.451  55.687  27.107  1.00 19.18          N
ATOM   8728  CA  PRO C 277    -7.401  54.873  27.871  1.00 21.44          C
ATOM   8729  C   PRO C 277    -7.073  54.800  29.371  1.00 22.39          C
ATOM   8730  O   PRO C 277    -7.919  54.408  30.199  1.00 19.96          O
ATOM   8731  CB  PRO C 277    -7.302  53.496  27.214  1.00 20.52          C
ATOM   8732  CG  PRO C 277    -6.932  53.807  25.795  1.00 21.98          C
ATOM   8733  CD  PRO C 277    -5.920  54.945  25.950  1.00 19.98          C
ATOM   8734  N   PHE C 278    -5.846  55.203  29.718  1.00 20.52          N
ATOM   8735  CA  PHE C 278    -5.413  55.141  31.111  1.00 21.72          C
ATOM   8736  C   PHE C 278    -5.097  56.516  31.743  1.00 20.63          C
ATOM   8737  O   PHE C 278    -4.491  56.584  32.823  1.00 20.94          O
ATOM   8738  CB  PHE C 278    -4.172  54.233  31.211  1.00 21.76          C
ATOM   8739  CG  PHE C 278    -4.271  52.962  30.411  1.00 21.63          C
ATOM   8740  CD1 PHE C 278    -3.891  52.931  29.074  1.00 19.23          C
ATOM   8741  CD2 PHE C 278    -4.705  51.775  31.002  1.00 23.77          C
ATOM   8742  CE1 PHE C 278    -3.931  51.764  28.343  1.00 21.14          C
ATOM   8743  CE2 PHE C 278    -4.752  50.596  30.269  1.00 21.11          C
ATOM   8744  CZ  PHE C 278    -4.367  50.581  28.947  1.00 22.63          C
ATOM   8745  N   ALA C 279    -5.529  57.594  31.095  1.00 19.87          N
ATOM   8746  CA  ALA C 279    -5.254  58.944  31.584  1.00 20.87          C
ATOM   8747  C   ALA C 279    -6.444  59.906  31.591  1.00 21.46          C
ATOM   8748  O   ALA C 279    -7.110  60.046  30.576  1.00 21.17          O
ATOM   8749  CB  ALA C 279    -4.155  59.547  30.751  1.00 20.95          C
ATOM   8750  N   ASP C 280    -6.711  60.556  32.719  1.00 19.73          N
ATOM   8751  CA  ASP C 280    -7.795  61.532  32.763  1.00 22.07          C
ATOM   8752  C   ASP C 280    -7.359  62.797  32.015  1.00 22.07          C
ATOM   8753  O   ASP C 280    -8.195  63.523  31.470  1.00 22.59          O
ATOM   8754  CB  ASP C 280    -8.178  61.847  34.197  1.00 22.27          C
ATOM   8755  CG  ASP C 280    -8.709  60.637  34.924  1.00 23.84          C
ATOM   8756  OD1 ASP C 280    -9.519  59.899  34.326  1.00 23.07          O
ATOM   8757  OD2 ASP C 280    -8.331  60.412  36.091  1.00 20.98          O
ATOM   8758  N   LEU C 281    -6.047  63.052  31.983  1.00 22.10          N
ATOM   8759  CA  LEU C 281    -5.474  64.157  31.246  1.00 21.29          C
ATOM   8760  C   LEU C 281    -4.157  63.734  30.640  1.00 22.96          C
ATOM   8761  O   LEU C 281    -3.443  62.902  31.204  1.00 21.47          O
ATOM   8762  CB  LEU C 281    -5.222  65.368  32.130  1.00 22.86          C
ATOM   8763  CG  LEU C 281    -6.459  66.124  32.554  1.00 23.47          C
ATOM   8764  CD1 LEU C 281    -6.720  65.799  33.964  1.00 24.17          C
ATOM   8765  CD2 LEU C 281    -6.250  67.612  32.365  1.00 25.89          C
ATOM   8766  N   ILE C 282    -3.822  64.312  29.492  1.00 21.80          N
ATOM   8767  CA  ILE C 282    -2.565  63.989  28.843  1.00 22.72          C
ATOM   8768  C   ILE C 282    -1.793  65.252  28.591  1.00 22.35          C
ATOM   8769  O   ILE C 282    -2.363  66.248  28.173  1.00 18.69          O
ATOM   8770  CB  ILE C 282    -2.762  63.258  27.506  1.00 25.71          C
ATOM   8771  CG1 ILE C 282    -3.359  61.868  27.774  1.00 25.76          C
ATOM   8772  CG2 ILE C 282    -1.388  63.124  26.785  1.00 24.94          C
ATOM   8773  CD1 ILE C 282    -3.986  61.163  26.537  1.00 26.80          C
ATOM   8774  N   TRP C 283    -0.470  65.168  28.781  1.00 21.60          N
ATOM   8775  CA  TRP C 283     0.418  66.310  28.645  1.00 20.53          C
ATOM   8776  C   TRP C 283     1.687  65.976  27.891  1.00 21.38          C
ATOM   8777  O   TRP C 283     2.274  64.928  28.120  1.00 20.65          O
ATOM   8778  CB  TRP C 283     0.713  66.778  30.080  1.00 19.80          C
ATOM   8779  CG  TRP C 283     1.982  67.539  30.376  1.00 20.17          C
ATOM   8780  CD1 TRP C 283     2.699  68.338  29.531  1.00 19.51          C
ATOM   8781  CD2 TRP C 283     2.596  67.655  31.663  1.00 20.03          C
ATOM   8782  NE1 TRP C 283     3.729  68.950  30.222  1.00 21.44          N
ATOM   8783  CE2 TRP C 283     3.684  68.541  31.533  1.00 19.80          C
ATOM   8784  CE3 TRP C 283     2.325  67.092  32.922  1.00 20.96          C
ATOM   8785  CZ2 TRP C 283     4.504  68.877  32.610  1.00 22.48          C
ATOM   8786  CZ3 TRP C 283     3.140  67.419  33.996  1.00 22.43          C
ATOM   8787  CH2 TRP C 283     4.217  68.303  33.833  1.00 22.33          C
ATOM   8788  N   MET C 284     2.093  66.824  26.945  1.00 20.44          N
ATOM   8789  CA  MET C 284     3.352  66.558  26.265  1.00 21.59          C
ATOM   8790  C   MET C 284     4.269  67.739  26.552  1.00 23.58          C
ATOM   8791  O   MET C 284     3.851  68.886  26.403  1.00 22.38          O
ATOM   8792  CB  MET C 284     3.184  66.364  24.741  1.00 22.87          C
ATOM   8793  CG  MET C 284     3.165  67.616  23.908  1.00 24.16          C
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ATOM   8794  SD   MET C 284      3.369  67.248  22.114  1.00 25.82       S
ATOM   8795  CE   MET C 284      5.005  67.710  21.797  1.00 26.37       C
ATOM   8796  N    GLU C 285      5.497  67.468  27.003  1.00 23.85       N
ATOM   8797  CA   GLU C 285      6.438  68.557  27.277  1.00 24.26       C
ATOM   8798  C    GLU C 285      6.907  69.068  25.911  1.00 24.18       C
ATOM   8799  O    GLU C 285      7.086  68.276  24.975  1.00 23.31       O
ATOM   8800  CB   GLU C 285      7.629  68.056  28.093  1.00 25.07       C
ATOM   8801  CG   GLU C 285      7.398  67.974  29.596  1.00 26.65       C
ATOM   8802  CD   GLU C 285      7.324  69.360  30.304  1.00 28.54       C
ATOM   8803  OE1  GLU C 285      6.353  70.114  30.092  1.00 29.94       O
ATOM   8804  OE2  GLU C 285      8.222  69.683  31.097  1.00 29.50       O
ATOM   8805  N    THR C 286      7.058  70.386  25.775  1.00 25.02       N
ATOM   8806  CA   THR C 286      7.513  70.971  24.496  1.00 27.41       C
ATOM   8807  C    THR C 286      8.705  71.899  24.717  1.00 28.29       C
ATOM   8808  O    THR C 286      8.911  72.419  25.823  1.00 27.44       O
ATOM   8809  CB   THR C 286      6.392  71.790  23.802  1.00 27.69       C
ATOM   8810  OG1  THR C 286      5.877  72.774  24.714  1.00 29.84       O
ATOM   8811  CG2  THR C 286      5.250  70.902  23.399  1.00 30.39       C
ATOM   8812  N    GLY C 287      9.488  72.106  23.662  1.00 29.29       N
ATOM   8813  CA   GLY C 287     10.656  72.966  23.771  1.00 29.61       C
ATOM   8814  C    GLY C 287     10.397  74.478  23.742  1.00 31.13       C
ATOM   8815  O    GLY C 287     11.281  75.255  24.081  1.00 32.58       O
ATOM   8816  N    THR C 288      9.205  74.905  23.338  1.00 30.23       N
ATOM   8817  CA   THR C 288      8.887  76.324  23.279  1.00 30.27       C
ATOM   8818  C    THR C 288      7.387  76.516  23.467  1.00 30.00       C
ATOM   8819  O    THR C 288      6.599  75.585  23.236  1.00 29.21       O
ATOM   8820  CB   THR C 288      9.233  76.924  21.903  1.00 30.95       C
ATOM   8821  OG1  THR C 288      8.415  76.294  20.915  1.00 32.16       O
ATOM   8822  CG2  THR C 288     10.695  76.712  21.552  1.00 30.96       C
ATOM   8823  N    PRO C 289      6.965  77.716  23.898  1.00 29.49       N
ATOM   8824  CA   PRO C 289      5.529  77.922  24.066  1.00 30.58       C
ATOM   8825  C    PRO C 289      4.946  78.228  22.658  1.00 32.58       C
ATOM   8826  O    PRO C 289      4.831  79.385  22.257  1.00 32.01       O
ATOM   8827  CB   PRO C 289      5.473  79.117  25.016  1.00 31.31       C
ATOM   8828  CG   PRO C 289      6.694  79.909  24.615  1.00 29.69       C
ATOM   8829  CD   PRO C 289      7.735  78.850  24.448  1.00 30.55       C
ATOM   8830  N    ASP C 290      4.569  77.185  21.926  1.00 33.19       N
ATOM   8831  CA   ASP C 290      4.055  77.315  20.553  1.00 33.63       C
ATOM   8832  C    ASP C 290      2.591  76.872  20.416  1.00 33.45       C
ATOM   8833  O    ASP C 290      2.284  75.677  20.490  1.00 32.52       O
ATOM   8834  CB   ASP C 290      4.957  76.480  19.653  1.00 34.50       C
ATOM   8835  CG   ASP C 290      4.550  76.508  18.197  1.00 36.48       C
ATOM   8836  OD1  ASP C 290      3.634  77.263  17.806  1.00 37.71       O
ATOM   8837  OD2  ASP C 290      5.168  75.751  17.426  1.00 37.99       O
ATOM   8838  N    LEU C 291      1.693  77.837  20.217  1.00 32.42       N
ATOM   8839  CA   LEU C 291      0.267  77.537  20.088  1.00 31.35       C
ATOM   8840  C    LEU C 291     -0.027  76.651  18.876  1.00 31.58       C
ATOM   8841  O    LEU C 291     -1.000  75.892  18.861  1.00 30.70       O
ATOM   8842  CB   LEU C 291     -0.541  78.832  19.977  1.00 31.54       C
ATOM   8843  CG   LEU C 291     -0.633  79.787  21.181  1.00 31.16       C
ATOM   8844  CD1  LEU C 291     -1.349  81.061  20.741  1.00 30.33       C
ATOM   8845  CD2  LEU C 291     -1.383  79.137  22.349  1.00 29.15       C
ATOM   8846  N    GLU C 292      0.798  76.765  17.850  1.00 32.29       N
ATOM   8847  CA   GLU C 292      0.590  75.965  16.654  1.00 35.17       C
ATOM   8848  C    GLU C 292      0.874  74.482  16.945  1.00 34.09       C
ATOM   8849  O    GLU C 292      0.055  73.618  16.616  1.00 34.12       O
ATOM   8850  CB   GLU C 292      1.472  76.494  15.528  1.00 37.90       C
ATOM   8851  CG   GLU C 292      0.677  76.917  14.298  1.00 43.68       C
ATOM   8852  CD   GLU C 292      0.027  75.729  13.594  1.00 46.72       C
ATOM   8853  OE1  GLU C 292      0.771  74.808  13.169  1.00 48.13       O
ATOM   8854  OE2  GLU C 292     -1.223  75.716  13.463  1.00 48.71       O
ATOM   8855  N    ALA C 293      2.015  74.216  17.591  1.00 32.75       N
ATOM   8856  CA   ALA C 293      2.423  72.866  17.972  1.00 31.35       C
ATOM   8857  C    ALA C 293      1.389  72.316  18.954  1.00 30.82       C
ATOM   8858  O    ALA C 293      1.033  71.140  18.910  1.00 30.04       O
ATOM   8859  CB   ALA C 293      3.793  72.890  18.620  1.00 30.91       C
ATOM   8860  N    ALA C 294      0.903  73.169  19.846  1.00 29.08       N
ATOM   8861  CA   ALA C 294     -0.105  72.725  20.778  1.00 29.15       C
ATOM   8862  C    ALA C 294     -1.317  72.232  20.008  1.00 29.92       C
ATOM   8863  O    ALA C 294     -1.868  71.163  20.306  1.00 29.08       O
ATOM   8864  CB   ALA C 294     -0.515  73.854  21.703  1.00 27.47       C
ATOM   8865  N    ARG C 295     -1.745  73.017  19.019  1.00 30.77       N
ATOM   8866  CA   ARG C 295     -2.923  72.669  18.225  1.00 30.66       C
ATOM   8867  C    ARG C 295     -2.696  71.377  17.459  1.00 30.18       C
ATOM   8868  O    ARG C 295     -3.603  70.547  17.341  1.00 29.63       O
ATOM   8869  CB   ARG C 295     -3.271  73.795  17.238  1.00 33.27       C
ATOM   8870  CG   ARG C 295     -4.598  73.580  16.507  1.00 35.19       C
ATOM   8871  CD   ARG C 295     -4.607  74.378  15.216  1.00 40.24       C
ATOM   8872  NE   ARG C 295     -4.203  75.770  15.432  1.00 43.88       N
ATOM   8873  CZ   ARG C 295     -4.926  76.670  16.107  1.00 46.59       C
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| ATOM | 8874 | NH1 | ARG | C | 295 | -6.104 | 76.331 | 16.641 | 1.00 | 47.11 | N |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 8875 | NH2 | ARG | C | 295 | -4.472 | 77.912 | 16.256 | 1.00 | 46.18 | N |
| ATOM | 8876 | N | GLN | C | 296 | -1.494 | 71.211 | 16.921 | 1.00 | 29.36 | N |
| ATOM | 8877 | CA | GLN | C | 296 | -1.177 | 69.994 | 16.191 | 1.00 | 30.88 | C |
| ATOM | 8878 | C | GLN | C | 296 | -1.320 | 68.723 | 17.058 | 1.00 | 30.25 | C |
| ATOM | 8879 | O | GLN | C | 296 | -1.878 | 67.715 | 16.622 | 1.00 | 29.33 | O |
| ATOM | 8880 | CB | GLN | C | 296 | 0.231 | 70.084 | 15.639 | 1.00 | 31.02 | C |
| ATOM | 8881 | CG | GLN | C | 296 | 0.633 | 68.823 | 14.933 | 1.00 | 36.70 | C |
| ATOM | 8882 | CD | GLN | C | 296 | 1.976 | 68.936 | 14.236 | 1.00 | 38.30 | C |
| ATOM | 8883 | OE1 | GLN | C | 296 | 2.592 | 70.008 | 14.209 | 1.00 | 39.93 | O |
| ATOM | 8884 | NE2 | GLN | C | 296 | 2.439 | 67.820 | 13.663 | 1.00 | 38.97 | N |
| ATOM | 8885 | N | PHE | C | 297 | -0.798 | 68.782 | 18.279 | 1.00 | 29.45 | N |
| ATOM | 8886 | CA | PHE | C | 297 | -0.882 | 67.668 | 19.223 | 1.00 | 27.92 | C |
| ATOM | 8887 | C | PHE | C | 297 | -2.349 | 67.443 | 19.607 | 1.00 | 29.30 | C |
| ATOM | 8888 | O | PHE | C | 297 | -2.879 | 66.326 | 19.543 | 1.00 | 28.77 | O |
| ATOM | 8889 | CB | PHE | C | 297 | -0.065 | 68.027 | 20.465 | 1.00 | 26.49 | C |
| ATOM | 8890 | CG | PHE | C | 297 | -0.161 | 67.022 | 21.567 | 1.00 | 26.87 | C |
| ATOM | 8891 | CD1 | PHE | C | 297 | 0.432 | 65.758 | 21.434 | 1.00 | 24.61 | C |
| ATOM | 8892 | CD2 | PHE | C | 297 | -0.865 | 67.320 | 22.730 | 1.00 | 23.75 | C |
| ATOM | 8893 | CE1 | PHE | C | 297 | 0.317 | 64.822 | 22.437 | 1.00 | 25.10 | C |
| ATOM | 8894 | CE2 | PHE | C | 297 | -0.980 | 66.382 | 23.742 | 1.00 | 26.06 | C |
| ATOM | 8895 | CZ | PHE | C | 297 | -0.383 | 65.119 | 23.589 | 1.00 | 22.56 | C |
| ATOM | 8896 | N | SER | C | 298 | -3.010 | 68.517 | 20.020 | 1.00 | 29.03 | N |
| ATOM | 8897 | CA | SER | C | 298 | -4.404 | 68.452 | 20.410 | 1.00 | 30.69 | C |
| ATOM | 8898 | C | SER | C | 298 | -5.316 | 67.813 | 19.344 | 1.00 | 30.33 | C |
| ATOM | 8899 | O | SER | C | 298 | -6.069 | 66.862 | 19.636 | 1.00 | 30.82 | O |
| ATOM | 8900 | CB | SER | C | 298 | -4.898 | 69.862 | 20.752 | 1.00 | 32.23 | C |
| ATOM | 8901 | OG | SER | C | 298 | -6.263 | 69.841 | 21.107 | 1.00 | 34.09 | O |
| ATOM | 8902 | N | GLU | C | 299 | -5.257 | 68.327 | 18.118 | 1.00 | 30.60 | N |
| ATOM | 8903 | CA | GLU | C | 299 | -6.090 | 67.790 | 17.016 | 1.00 | 31.66 | C |
| ATOM | 8904 | C | GLU | C | 299 | -5.781 | 66.320 | 16.744 | 1.00 | 30.34 | C |
| ATOM | 8905 | O | GLU | C | 299 | -6.675 | 65.492 | 16.598 | 1.00 | 30.08 | O |
| ATOM | 8906 | CB | GLU | C | 299 | -5.880 | 68.605 | 15.732 | 1.00 | 31.73 | C |
| ATOM | 8907 | CG | GLU | C | 299 | -6.701 | 69.901 | 15.719 | 1.00 | 36.13 | C |
| ATOM | 8908 | CD | GLU | C | 299 | -6.397 | 70.803 | 14.527 | 1.00 | 38.88 | C |
| ATOM | 8909 | OE1 | GLU | C | 299 | -5.885 | 70.305 | 13.493 | 1.00 | 40.79 | O |
| ATOM | 8910 | OE2 | GLU | C | 299 | -6.685 | 72.014 | 14.626 | 1.00 | 39.99 | O |
| ATOM | 8911 | N | ALA | C | 300 | -4.499 | 66.010 | 16.666 | 1.00 | 30.73 | N |
| ATOM | 8912 | CA | ALA | C | 300 | -4.095 | 64.639 | 16.442 | 1.00 | 30.70 | C |
| ATOM | 8913 | C | ALA | C | 300 | -4.676 | 63.701 | 17.521 | 1.00 | 30.46 | C |
| ATOM | 8914 | O | ALA | C | 300 | -5.265 | 62.664 | 17.195 | 1.00 | 30.67 | O |
| ATOM | 8915 | CB | ALA | C | 300 | -2.559 | 64.561 | 16.384 | 1.00 | 30.35 | C |
| ATOM | 8916 | N | VAL | C | 301 | -4.554 | 64.049 | 18.802 | 1.00 | 29.28 | N |
| ATOM | 8917 | CA | VAL | C | 301 | -5.100 | 63.166 | 19.841 | 1.00 | 29.70 | C |
| ATOM | 8918 | C | VAL | C | 301 | -6.635 | 63.067 | 19.856 | 1.00 | 30.78 | C |
| ATOM | 8919 | O | VAL | C | 301 | -7.199 | 61.968 | 19.967 | 1.00 | 28.83 | O |
| ATOM | 8920 | CB | VAL | C | 301 | -4.618 | 63.554 | 21.282 | 1.00 | 28.39 | C |
| ATOM | 8921 | CG1 | VAL | C | 301 | -5.318 | 62.683 | 22.309 | 1.00 | 29.22 | C |
| ATOM | 8922 | CG2 | VAL | C | 301 | -3.120 | 63.335 | 21.415 | 1.00 | 27.86 | C |
| ATOM | 8923 | N | LYS | C | 302 | -7.305 | 64.208 | 19.733 | 1.00 | 31.73 | N |
| ATOM | 8924 | CA | LYS | C | 302 | -8.759 | 64.220 | 19.768 | 1.00 | 33.75 | C |
| ATOM | 8925 | C | LYS | C | 302 | -9.405 | 63.520 | 18.571 | 1.00 | 34.90 | C |
| ATOM | 8926 | O | LYS | C | 302 | -10.567 | 63.104 | 18.650 | 1.00 | 36.70 | O |
| ATOM | 8927 | CB | LYS | C | 302 | -9.274 | 65.654 | 19.902 | 1.00 | 33.84 | C |
| ATOM | 8928 | CG | LYS | C | 302 | -9.124 | 66.216 | 21.314 | 1.00 | 33.74 | C |
| ATOM | 8929 | CD | LYS | C | 302 | -9.636 | 67.651 | 21.401 | 1.00 | 33.80 | C |
| ATOM | 8930 | CE | LYS | C | 302 | -9.490 | 68.214 | 22.804 | 1.00 | 32.48 | C |
| ATOM | 8931 | NZ | LYS | C | 302 | -10.378 | 67.513 | 23.771 | 1.00 | 31.64 | N |
| ATOM | 8932 | N | ALA | C | 303 | -8.646 | 63.372 | 17.484 | 1.00 | 34.94 | N |
| ATOM | 8933 | CA | ALA | C | 303 | -9.130 | 62.692 | 16.292 | 1.00 | 35.17 | C |
| ATOM | 8934 | C | ALA | C | 303 | -9.539 | 61.260 | 16.651 | 1.00 | 36.37 | C |
| ATOM | 8935 | O | ALA | C | 303 | -10.458 | 60.697 | 16.059 | 1.00 | 35.91 | O |
| ATOM | 8936 | CB | ALA | C | 303 | -8.062 | 62.674 | 15.245 | 1.00 | 32.70 | C |
| ATOM | 8937 | N | GLU | C | 304 | -8.850 | 60.683 | 17.630 | 1.00 | 36.20 | N |
| ATOM | 8938 | CA | GLU | C | 304 | -9.139 | 59.334 | 18.084 | 1.00 | 37.61 | C |
| ATOM | 8939 | C | GLU | C | 304 | -9.861 | 59.295 | 19.428 | 1.00 | 36.50 | C |
| ATOM | 8940 | O | GLU | C | 304 | -10.611 | 58.363 | 19.717 | 1.00 | 36.26 | O |
| ATOM | 8941 | CB | GLU | C | 304 | -7.843 | 58.527 | 18.170 | 1.00 | 40.93 | C |
| ATOM | 8942 | CG | GLU | C | 304 | -7.578 | 57.681 | 16.934 | 1.00 | 45.71 | C |
| ATOM | 8943 | CD | GLU | C | 304 | -6.360 | 56.811 | 17.095 | 1.00 | 48.27 | C |
| ATOM | 8944 | OE1 | GLU | C | 304 | -6.249 | 56.144 | 18.144 | 1.00 | 50.43 | O |
| ATOM | 8945 | OE2 | GLU | C | 304 | -5.511 | 56.791 | 16.174 | 1.00 | 50.88 | O |
| ATOM | 8946 | N | TYR | C | 305 | -9.632 | 60.306 | 20.256 | 1.00 | 34.92 | N |
| ATOM | 8947 | CA | TYR | C | 305 | -10.262 | 60.377 | 21.570 | 1.00 | 33.86 | C |
| ATOM | 8948 | C | TYR | C | 305 | -10.766 | 61.800 | 21.698 | 1.00 | 34.32 | C |
| ATOM | 8949 | O | TYR | C | 305 | -10.135 | 62.641 | 22.339 | 1.00 | 32.82 | O |
| ATOM | 8950 | CB | TYR | C | 305 | -9.239 | 60.091 | 22.667 | 1.00 | 32.72 | C |
| ATOM | 8951 | CG | TYR | C | 305 | -8.640 | 58.710 | 22.577 | 1.00 | 32.00 | C |
| ATOM | 8952 | CD1 | TYR | C | 305 | -9.324 | 57.603 | 23.079 | 1.00 | 31.58 | C |
| ATOM | 8953 | CD2 | TYR | C | 305 | -7.413 | 58.504 | 21.942 | 1.00 | 30.73 | C |

| ATOM | 8954 | CE1 | TYR | C | 305 | -8.813 | 56.320 | 22.947 | 1.00 | 33.76 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 8955 | CE2 | TYR | C | 305 | -6.880 | 57.210 | 21.803 | 1.00 | 32.02 | C |
| ATOM | 8956 | CZ | TYR | C | 305 | -7.586 | 56.133 | 22.304 | 1.00 | 31.38 | C |
| ATOM | 8957 | OH | TYR | C | 305 | -7.089 | 54.863 | 22.166 | 1.00 | 34.15 | O |
| ATOM | 8958 | N | PRO | C | 306 | -11.913 | 62.087 | 21.067 | 1.00 | 34.56 | N |
| ATOM | 8959 | CA | PRO | C | 306 | -12.492 | 63.425 | 21.107 | 1.00 | 34.54 | C |
| ATOM | 8960 | C | PRO | C | 306 | -12.745 | 64.021 | 22.481 | 1.00 | 34.35 | C |
| ATOM | 8961 | O | PRO | C | 306 | -12.600 | 65.225 | 22.638 | 1.00 | 35.04 | O |
| ATOM | 8962 | CB | PRO | C | 306 | -13.763 | 63.287 | 20.247 | 1.00 | 34.79 | C |
| ATOM | 8963 | CG | PRO | C | 306 | -14.107 | 61.833 | 20.327 | 1.00 | 35.00 | C |
| ATOM | 8964 | CD | PRO | C | 306 | -12.757 | 61.155 | 20.297 | 1.00 | 33.68 | C |
| ATOM | 8965 | N | ASP | C | 307 | -13.098 | 63.209 | 23.479 | 1.00 | 34.11 | N |
| ATOM | 8966 | CA | ASP | C | 307 | -13.358 | 63.759 | 24.817 | 1.00 | 34.10 | C |
| ATOM | 8967 | C | ASP | C | 307 | -12.123 | 63.848 | 25.724 | 1.00 | 33.10 | C |
| ATOM | 8968 | O | ASP | C | 307 | -12.229 | 64.285 | 26.864 | 1.00 | 33.32 | O |
| ATOM | 8969 | CB | ASP | C | 307 | -14.424 | 62.935 | 25.542 | 1.00 | 36.03 | C |
| ATOM | 8970 | CG | ASP | C | 307 | -15.730 | 62.877 | 24.789 | 1.00 | 37.15 | C |
| ATOM | 8971 | OD1 | ASP | C | 307 | -16.163 | 63.930 | 24.290 | 1.00 | 37.83 | O |
| ATOM | 8972 | OD2 | ASP | C | 307 | -16.323 | 61.778 | 24.706 | 1.00 | 40.25 | O |
| ATOM | 8973 | N | GLN | C | 308 | -10.963 | 63.422 | 25.227 | 1.00 | 32.22 | N |
| ATOM | 8974 | CA | GLN | C | 308 | -9.723 | 63.442 | 26.012 | 1.00 | 29.50 | C |
| ATOM | 8975 | C | GLN | C | 308 | -9.288 | 64.845 | 26.415 | 1.00 | 28.45 | C |
| ATOM | 8976 | O | GLN | C | 308 | -9.045 | 65.709 | 25.566 | 1.00 | 28.39 | O |
| ATOM | 8977 | CB | GLN | C | 308 | -8.601 | 62.770 | 25.224 | 1.00 | 28.05 | C |
| ATOM | 8978 | CG | GLN | C | 308 | -7.275 | 62.684 | 25.968 | 1.00 | 27.71 | C |
| ATOM | 8979 | CD | GLN | C | 308 | -7.374 | 61.927 | 27.279 | 1.00 | 24.65 | C |
| ATOM | 8980 | OE1 | GLN | C | 308 | -7.213 | 62.507 | 28.355 | 1.00 | 25.34 | O |
| ATOM | 8981 | NE2 | GLN | C | 308 | -7.628 | 60.634 | 27.201 | 1.00 | 21.70 | N |
| ATOM | 8982 | N | MET | C | 309 | -9.175 | 65.074 | 27.718 | 1.00 | 28.04 | N |
| ATOM | 8983 | CA | MET | C | 309 | -8.745 | 66.379 | 28.196 | 1.00 | 27.92 | C |
| ATOM | 8984 | C | MET | C | 309 | -7.227 | 66.431 | 28.185 | 1.00 | 27.45 | C |
| ATOM | 8985 | O | MET | C | 309 | -6.559 | 65.405 | 28.359 | 1.00 | 25.80 | O |
| ATOM | 8986 | CB | MET | C | 309 | -9.270 | 66.654 | 29.607 | 1.00 | 29.09 | C |
| ATOM | 8987 | CG | MET | C | 309 | -10.754 | 66.984 | 29.671 | 1.00 | 29.59 | C |
| ATOM | 8988 | SD | MET | C | 309 | -11.266 | 67.553 | 31.325 | 1.00 | 31.68 | S |
| ATOM | 8989 | CE | MET | C | 309 | -11.598 | 66.029 | 32.130 | 1.00 | 32.44 | C |
| ATOM | 8990 | N | LEU | C | 310 | -6.690 | 67.620 | 27.949 | 1.00 | 25.53 | N |
| ATOM | 8991 | CA | LEU | C | 310 | -5.244 | 67.797 | 27.887 | 1.00 | 26.09 | C |
| ATOM | 8992 | C | LEU | C | 310 | -4.719 | 68.741 | 28.982 | 1.00 | 25.47 | C |
| ATOM | 8993 | O | LEU | C | 310 | -5.476 | 69.489 | 29.599 | 1.00 | 25.64 | O |
| ATOM | 8994 | CB | LEU | C | 310 | -4.850 | 68.351 | 26.518 | 1.00 | 24.56 | C |
| ATOM | 8995 | CG | LEU | C | 310 | -5.471 | 67.642 | 25.301 | 1.00 | 25.80 | C |
| ATOM | 8996 | CD1 | LEU | C | 310 | -5.089 | 68.390 | 24.041 | 1.00 | 26.15 | C |
| ATOM | 8997 | CD2 | LEU | C | 310 | -5.010 | 66.188 | 25.225 | 1.00 | 22.64 | C |
| ATOM | 8998 | N | ALA | C | 311 | -3.418 | 68.706 | 29.224 | 1.00 | 23.70 | N |
| ATOM | 8999 | CA | ALA | C | 311 | -2.831 | 69.579 | 30.236 | 1.00 | 22.90 | C |
| ATOM | 9000 | C | ALA | C | 311 | -1.635 | 70.258 | 29.577 | 1.00 | 21.68 | C |
| ATOM | 9001 | O | ALA | C | 311 | -1.017 | 69.670 | 28.703 | 1.00 | 24.18 | O |
| ATOM | 9002 | CB | ALA | C | 311 | -2.406 | 68.742 | 31.458 | 1.00 | 20.28 | C |
| ATOM | 9003 | N | TYR | C | 312 | -1.312 | 71.488 | 29.979 | 1.00 | 22.19 | N |
| ATOM | 9004 | CA | TYR | C | 312 | -0.192 | 72.204 | 29.381 | 1.00 | 20.54 | C |
| ATOM | 9005 | C | TYR | C | 312 | 0.671 | 72.969 | 30.404 | 1.00 | 21.26 | C |
| ATOM | 9006 | O | TYR | C | 312 | 0.165 | 73.695 | 31.269 | 1.00 | 19.65 | O |
| ATOM | 9007 | CB | TYR | C | 312 | -0.715 | 73.168 | 28.280 | 1.00 | 21.66 | C |
| ATOM | 9008 | CG | TYR | C | 312 | 0.368 | 73.725 | 27.399 | 1.00 | 21.24 | C |
| ATOM | 9009 | CD1 | TYR | C | 312 | 1.210 | 74.744 | 27.848 | 1.00 | 23.15 | C |
| ATOM | 9010 | CD2 | TYR | C | 312 | 0.560 | 73.228 | 26.116 | 1.00 | 21.67 | C |
| ATOM | 9011 | CE1 | TYR | C | 312 | 2.223 | 75.250 | 27.028 | 1.00 | 22.67 | C |
| ATOM | 9012 | CE2 | TYR | C | 312 | 1.556 | 73.721 | 25.294 | 1.00 | 23.18 | C |
| ATOM | 9013 | CZ | TYR | C | 312 | 2.386 | 74.730 | 25.755 | 1.00 | 25.11 | C |
| ATOM | 9014 | OH | TYR | C | 312 | 3.411 | 75.164 | 24.951 | 1.00 | 23.20 | O |
| ATOM | 9015 | N | ASN | C | 313 | 1.977 | 72.791 | 30.277 | 1.00 | 21.95 | N |
| ATOM | 9016 | CA | ASN | C | 313 | 2.955 | 73.416 | 31.147 | 1.00 | 23.18 | C |
| ATOM | 9017 | C | ASN | C | 313 | 3.494 | 74.742 | 30.590 | 1.00 | 23.34 | C |
| ATOM | 9018 | O | ASN | C | 313 | 4.322 | 74.752 | 29.684 | 1.00 | 23.66 | O |
| ATOM | 9019 | CB | ASN | C | 313 | 4.118 | 72.449 | 31.375 | 1.00 | 24.83 | C |
| ATOM | 9020 | CG | ASN | C | 313 | 5.274 | 73.087 | 32.107 | 1.00 | 25.20 | C |
| ATOM | 9021 | OD1 | ASN | C | 313 | 5.117 | 74.146 | 32.691 | 1.00 | 27.08 | O |
| ATOM | 9022 | ND2 | ASN | C | 313 | 6.453 | 72.434 | 32.082 | 1.00 | 26.30 | N |
| ATOM | 9023 | N | CYS | C | 314 | 2.999 | 75.858 | 31.120 | 1.00 | 23.17 | N |
| ATOM | 9024 | CA | CYS | C | 314 | 3.488 | 77.181 | 30.680 | 1.00 | 24.09 | C |
| ATOM | 9025 | C | CYS | C | 314 | 4.740 | 77.360 | 31.526 | 1.00 | 24.07 | C |
| ATOM | 9026 | O | CYS | C | 314 | 4.739 | 78.055 | 32.532 | 1.00 | 23.37 | O |
| ATOM | 9027 | CB | CYS | C | 314 | 2.450 | 78.266 | 31.012 | 1.00 | 24.24 | C |
| ATOM | 9028 | SG | CYS | C | 314 | 0.764 | 78.005 | 30.297 | 1.00 | 26.14 | S |
| ATOM | 9029 | N | SER | C | 315 | 5.814 | 76.717 | 31.100 | 1.00 | 25.60 | N |
| ATOM | 9030 | CA | SER | C | 315 | 7.055 | 76.697 | 31.861 | 1.00 | 25.35 | C |
| ATOM | 9031 | C | SER | C | 315 | 7.899 | 77.932 | 32.003 | 1.00 | 25.46 | C |
| ATOM | 9032 | O | SER | C | 315 | 8.087 | 78.665 | 31.041 | 1.00 | 23.79 | O |
| ATOM | 9033 | CB | SER | C | 315 | 7.960 | 75.616 | 31.310 | 1.00 | 25.17 | C |

| ATOM | 9034 | OG | SER C 315 | 9.191 | 75.582 | 32.009 | 1.00 | 27.49 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 9035 | N | PRO C 316 | 8.387 | 78.198 | 33.230 | 1.00 | 25.49 | N |
| ATOM | 9036 | CA | PRO C 316 | 9.252 | 79.368 | 33.433 | 1.00 | 25.65 | C |
| ATOM | 9037 | C | PRO C 316 | 10.581 | 79.015 | 32.764 | 1.00 | 25.47 | C |
| ATOM | 9038 | O | PRO C 316 | 11.470 | 79.851 | 32.666 | 1.00 | 25.48 | O |
| ATOM | 9039 | CB | PRO C 316 | 9.386 | 79.443 | 34.948 | 1.00 | 25.00 | C |
| ATOM | 9040 | CG | PRO C 316 | 7.996 | 79.026 | 35.397 | 1.00 | 26.12 | C |
| ATOM | 9041 | CD | PRO C 316 | 7.795 | 77.777 | 34.517 | 1.00 | 25.63 | C |
| ATOM | 9042 | N | SER C 317 | 10.702 | 77.769 | 32.294 | 1.00 | 25.17 | N |
| ATOM | 9043 | CA | SER C 317 | 11.923 | 77.323 | 31.620 | 1.00 | 24.78 | C |
| ATOM | 9044 | C | SER C 317 | 11.977 | 77.878 | 30.192 | 1.00 | 25.56 | C |
| ATOM | 9045 | O | SER C 317 | 12.951 | 77.659 | 29.487 | 1.00 | 24.67 | O |
| ATOM | 9046 | CB | SER C 317 | 12.006 | 75.794 | 31.566 | 1.00 | 25.42 | C |
| ATOM | 9047 | OG | SER C 317 | 12.408 | 75.261 | 32.816 | 1.00 | 27.84 | O |
| ATOM | 9048 | N | PHE C 318 | 10.913 | 78.569 | 29.775 | 1.00 | 26.07 | N |
| ATOM | 9049 | CA | PHE C 318 | 10.902 | 79.207 | 28.447 | 1.00 | 28.32 | C |
| ATOM | 9050 | C | PHE C 318 | 11.233 | 80.689 | 28.644 | 1.00 | 29.73 | C |
| ATOM | 9051 | O | PHE C 318 | 10.887 | 81.260 | 29.677 | 1.00 | 30.38 | O |
| ATOM | 9052 | CB | PHE C 318 | 9.516 | 79.142 | 27.805 | 1.00 | 27.32 | C |
| ATOM | 9053 | CG | PHE C 318 | 9.015 | 77.750 | 27.567 | 1.00 | 25.70 | C |
| ATOM | 9054 | CD1 | PHE C 318 | 9.842 | 76.788 | 27.011 | 1.00 | 24.86 | C |
| ATOM | 9055 | CD2 | PHE C 318 | 7.680 | 77.422 | 27.842 | 1.00 | 27.61 | C |
| ATOM | 9056 | CE1 | PHE C 318 | 9.350 | 75.502 | 26.725 | 1.00 | 26.69 | C |
| ATOM | 9057 | CE2 | PHE C 318 | 7.175 | 76.139 | 27.556 | 1.00 | 27.53 | C |
| ATOM | 9058 | CZ | PHE C 318 | 8.014 | 75.181 | 26.996 | 1.00 | 26.91 | C |
| ATOM | 9059 | N | ASN C 319 | 11.917 | 81.304 | 27.679 | 1.00 | 31.93 | N |
| ATOM | 9060 | CA | ASN C 319 | 12.179 | 82.746 | 27.741 | 1.00 | 32.13 | C |
| ATOM | 9061 | C | ASN C 319 | 10.986 | 83.276 | 26.957 | 1.00 | 33.09 | C |
| ATOM | 9062 | O | ASN C 319 | 11.028 | 83.399 | 25.736 | 1.00 | 34.26 | O |
| ATOM | 9063 | CB | ASN C 319 | 13.489 | 83.089 | 27.039 | 1.00 | 32.44 | C |
| ATOM | 9064 | CG | ASN C 319 | 13.826 | 84.583 | 27.129 | 1.00 | 32.87 | C |
| ATOM | 9065 | OD1 | ASN C 319 | 14.989 | 84.969 | 27.040 | 1.00 | 33.56 | O |
| ATOM | 9066 | ND2 | ASN C 319 | 12.808 | 85.418 | 27.299 | 1.00 | 31.59 | N |
| ATOM | 9067 | N | TRP C 320 | 9.907 | 83.587 | 27.666 | 1.00 | 34.40 | N |
| ATOM | 9068 | CA | TRP C 320 | 8.673 | 83.996 | 27.019 | 1.00 | 34.49 | C |
| ATOM | 9069 | C | TRP C 320 | 8.691 | 85.112 | 25.983 | 1.00 | 36.25 | C |
| ATOM | 9070 | O | TRP C 320 | 8.276 | 84.880 | 24.844 | 1.00 | 35.81 | O |
| ATOM | 9071 | CB | TRP C 320 | 7.582 | 84.253 | 28.070 | 1.00 | 33.59 | C |
| ATOM | 9072 | CG | TRP C 320 | 7.162 | 82.970 | 28.729 | 1.00 | 33.50 | C |
| ATOM | 9073 | CD1 | TRP C 320 | 7.841 | 82.285 | 29.705 | 1.00 | 33.77 | C |
| ATOM | 9074 | CD2 | TRP C 320 | 6.017 | 82.165 | 28.400 | 1.00 | 32.16 | C |
| ATOM | 9075 | NE1 | TRP C 320 | 7.191 | 81.111 | 30.001 | 1.00 | 32.71 | N |
| ATOM | 9076 | CE2 | TRP C 320 | 6.071 | 81.007 | 29.219 | 1.00 | 32.36 | C |
| ATOM | 9077 | CE3 | TRP C 320 | 4.952 | 82.310 | 27.499 | 1.00 | 30.73 | C |
| ATOM | 9078 | CZ2 | TRP C 320 | 5.096 | 79.994 | 29.161 | 1.00 | 31.78 | C |
| ATOM | 9079 | CZ3 | TRP C 320 | 3.985 | 81.315 | 27.441 | 1.00 | 30.38 | C |
| ATOM | 9080 | CH2 | TRP C 320 | 4.064 | 80.164 | 28.271 | 1.00 | 31.00 | C |
| ATOM | 9081 | N | LYS C 321 | 9.184 | 86.300 | 26.329 | 1.00 | 37.34 | N |
| ATOM | 9082 | CA | LYS C 321 | 9.168 | 87.374 | 25.339 | 1.00 | 38.97 | C |
| ATOM | 9083 | C | LYS C 321 | 10.082 | 87.109 | 24.163 | 1.00 | 40.07 | C |
| ATOM | 9084 | O | LYS C 321 | 9.888 | 87.677 | 23.087 | 1.00 | 41.24 | O |
| ATOM | 9085 | CB | LYS C 321 | 9.482 | 88.728 | 25.990 | 1.00 | 39.20 | C |
| ATOM | 9086 | CG | LYS C 321 | 8.283 | 89.294 | 26.773 | 1.00 | 40.07 | C |
| ATOM | 9087 | CD | LYS C 321 | 8.620 | 90.584 | 27.502 | 1.00 | 41.07 | C |
| ATOM | 9088 | CE | LYS C 321 | 8.917 | 91.721 | 26.537 | 1.00 | 41.36 | C |
| ATOM | 9089 | NZ | LYS C 321 | 7.699 | 92.096 | 25.773 | 1.00 | 42.00 | N |
| ATOM | 9090 | N | LYS C 322 | 11.072 | 86.241 | 24.340 | 1.00 | 41.18 | N |
| ATOM | 9091 | CA | LYS C 322 | 11.962 | 85.938 | 23.230 | 1.00 | 41.53 | C |
| ATOM | 9092 | C | LYS C 322 | 11.230 | 85.144 | 22.131 | 1.00 | 41.77 | C |
| ATOM | 9093 | O | LYS C 322 | 11.694 | 85.058 | 20.995 | 1.00 | 41.07 | O |
| ATOM | 9094 | CB | LYS C 322 | 13.171 | 85.144 | 23.721 | 1.00 | 42.38 | C |
| ATOM | 9095 | CG | LYS C 322 | 13.890 | 84.362 | 22.619 | 1.00 | 42.96 | C |
| ATOM | 9096 | CD | LYS C 322 | 15.181 | 83.711 | 23.122 | 1.00 | 45.25 | C |
| ATOM | 9097 | CE | LYS C 322 | 15.874 | 82.928 | 22.014 | 1.00 | 45.60 | C |
| ATOM | 9098 | NZ | LYS C 322 | 17.220 | 82.405 | 22.416 | 1.00 | 47.30 | N |
| ATOM | 9099 | N | HIS C 323 | 10.075 | 84.581 | 22.467 | 1.00 | 42.61 | N |
| ATOM | 9100 | CA | HIS C 323 | 9.318 | 83.770 | 21.512 | 1.00 | 43.35 | C |
| ATOM | 9101 | C | HIS C 323 | 8.006 | 84.377 | 21.085 | 1.00 | 42.22 | C |
| ATOM | 9102 | O | HIS C 323 | 7.644 | 84.346 | 19.915 | 1.00 | 42.50 | O |
| ATOM | 9103 | CB | HIS C 323 | 9.018 | 82.395 | 22.118 | 1.00 | 44.62 | C |
| ATOM | 9104 | CG | HIS C 323 | 10.238 | 81.573 | 22.368 | 1.00 | 47.08 | C |
| ATOM | 9105 | ND1 | HIS C 323 | 10.827 | 80.803 | 21.389 | 1.00 | 48.16 | N |
| ATOM | 9106 | CD2 | HIS C 323 | 11.025 | 81.457 | 23.464 | 1.00 | 48.50 | C |
| ATOM | 9107 | CE1 | HIS C 323 | 11.927 | 80.251 | 21.868 | 1.00 | 49.33 | C |
| ATOM | 9108 | NE2 | HIS C 323 | 12.071 | 80.632 | 23.126 | 1.00 | 50.05 | N |
| ATOM | 9109 | N | LEU C 324 | 7.289 | 84.911 | 22.055 | 1.00 | 41.26 | N |
| ATOM | 9110 | CA | LEU C 324 | 5.985 | 85.471 | 21.807 | 1.00 | 40.74 | C |
| ATOM | 9111 | C | LEU C 324 | 5.940 | 86.974 | 21.988 | 1.00 | 41.70 | C |
| ATOM | 9112 | O | LEU C 324 | 6.813 | 87.552 | 22.639 | 1.00 | 41.36 | O |
| ATOM | 9113 | CB | LEU C 324 | 4.990 | 84.802 | 22.754 | 1.00 | 40.61 | C |

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ATOM   9114  CG   LEU C 324      4.901  83.274  22.637  1.00 38.22           C
ATOM   9115  CD1  LEU C 324      3.926  82.728  23.680  1.00 38.59           C
ATOM   9116  CD2  LEU C 324      4.427  82.895  21.240  1.00 37.91           C
ATOM   9117  N    ASP C 325      4.926  87.598  21.388  1.00 42.13           N
ATOM   9118  CA   ASP C 325      4.725  89.038  21.520  1.00 42.57           C
ATOM   9119  C    ASP C 325      3.630  89.198  22.571  1.00 41.39           C
ATOM   9120  O    ASP C 325      2.922  88.234  22.887  1.00 41.20           O
ATOM   9121  CB   ASP C 325      4.315  89.671  20.173  1.00 44.35           C
ATOM   9122  CG   ASP C 325      2.961  89.171  19.646  1.00 45.96           C
ATOM   9123  OD1  ASP C 325      2.240  88.418  20.346  1.00 46.49           O
ATOM   9124  OD2  ASP C 325      2.612  89.549  18.501  1.00 47.93           O
ATOM   9125  N    ASP C 326      3.478  90.398  23.109  1.00 40.24           N
ATOM   9126  CA   ASP C 326      2.491  90.637  24.157  1.00 38.76           C
ATOM   9127  C    ASP C 326      1.071  90.142  23.915  1.00 37.79           C
ATOM   9128  O    ASP C 326      0.441  89.579  24.818  1.00 36.72           O
ATOM   9129  CB   ASP C 326      2.458  92.128  24.490  1.00 39.81           C
ATOM   9130  CG   ASP C 326      3.587  92.541  25.412  1.00 41.16           C
ATOM   9131  OD1  ASP C 326      4.540  91.741  25.581  1.00 41.46           O
ATOM   9132  OD2  ASP C 326      3.520  93.667  25.970  1.00 41.62           O
ATOM   9133  N    ALA C 327      0.559  90.353  22.702  1.00 36.97           N
ATOM   9134  CA   ALA C 327     -0.812  89.950  22.371  1.00 35.54           C
ATOM   9135  C    ALA C 327     -1.039  88.442  22.505  1.00 34.39           C
ATOM   9136  O    ALA C 327     -2.052  87.996  23.059  1.00 34.17           O
ATOM   9137  CB   ALA C 327     -1.166  90.414  20.945  1.00 36.10           C
ATOM   9138  N    THR C 328     -0.090  87.661  22.006  1.00 33.63           N
ATOM   9139  CA   THR C 328     -0.203  86.204  22.077  1.00 33.22           C
ATOM   9140  C    THR C 328     -0.022  85.749  23.535  1.00 32.90           C
ATOM   9141  O    THR C 328     -0.754  84.887  24.034  1.00 31.53           O
ATOM   9142  CB   THR C 328      0.866  85.520  21.183  1.00 33.72           C
ATOM   9143  OG1  THR C 328      0.875  86.139  19.887  1.00 32.92           O
ATOM   9144  CG2  THR C 328      0.539  84.048  21.002  1.00 30.19           C
ATOM   9145  N    ILE C 329      0.949  86.343  24.218  1.00 33.11           N
ATOM   9146  CA   ILE C 329      1.184  86.001  25.613  1.00 32.75           C
ATOM   9147  C    ILE C 329     -0.131  86.207  26.350  1.00 33.78           C
ATOM   9148  O    ILE C 329     -0.565  85.356  27.133  1.00 34.19           O
ATOM   9149  CB   ILE C 329      2.306  86.883  26.189  1.00 32.46           C
ATOM   9150  CG1  ILE C 329      3.635  86.462  25.548  1.00 31.51           C
ATOM   9151  CG2  ILE C 329      2.341  86.807  27.734  1.00 34.39           C
ATOM   9152  CD1  ILE C 329      4.813  87.286  25.978  1.00 29.03           C
ATOM   9153  N    ALA C 330     -0.793  87.323  26.064  1.00 32.63           N
ATOM   9154  CA   ALA C 330     -2.068  87.633  26.701  1.00 31.84           C
ATOM   9155  C    ALA C 330     -3.188  86.629  26.442  1.00 30.32           C
ATOM   9156  O    ALA C 330     -4.017  86.381  27.326  1.00 29.97           O
ATOM   9157  CB   ALA C 330     -2.534  89.038  26.273  1.00 33.25           C
ATOM   9158  N    LYS C 331     -3.247  86.064  25.241  1.00 30.05           N
ATOM   9159  CA   LYS C 331     -4.331  85.127  24.938  1.00 31.28           C
ATOM   9160  C    LYS C 331     -3.867  83.679  24.995  1.00 30.84           C
ATOM   9161  O    LYS C 331     -4.661  82.766  24.757  1.00 31.06           O
ATOM   9162  CB   LYS C 331     -4.943  85.391  23.551  1.00 31.87           C
ATOM   9163  CG   LYS C 331     -4.063  84.977  22.369  1.00 35.81           C
ATOM   9164  CD   LYS C 331     -4.812  85.100  21.012  1.00 38.48           C
ATOM   9165  CE   LYS C 331     -3.905  84.752  19.816  1.00 40.19           C
ATOM   9166  NZ   LYS C 331     -4.525  85.164  18.515  1.00 41.40           N
ATOM   9167  N    PHE C 332     -2.596  83.483  25.328  1.00 30.76           N
ATOM   9168  CA   PHE C 332     -2.029  82.138  25.390  1.00 31.17           C
ATOM   9169  C    PHE C 332     -2.933  81.075  26.020  1.00 29.16           C
ATOM   9170  O    PHE C 332     -3.373  80.152  25.334  1.00 28.69           O
ATOM   9171  CB   PHE C 332     -0.691  82.160  26.119  1.00 30.76           C
ATOM   9172  CG   PHE C 332      0.201  81.020  25.755  1.00 33.46           C
ATOM   9173  CD1  PHE C 332      0.866  81.005  24.524  1.00 32.78           C
ATOM   9174  CD2  PHE C 332      0.361  79.941  26.629  1.00 32.48           C
ATOM   9175  CE1  PHE C 332      1.678  79.944  24.156  1.00 35.04           C
ATOM   9176  CE2  PHE C 332      1.173  78.855  26.277  1.00 33.43           C
ATOM   9177  CZ   PHE C 332      1.837  78.855  25.035  1.00 35.05           C
ATOM   9178  N    GLN C 333     -3.209  81.193  27.314  1.00 29.09           N
ATOM   9179  CA   GLN C 333     -4.048  80.192  27.979  1.00 28.70           C
ATOM   9180  C    GLN C 333     -5.477  80.087  27.427  1.00 30.09           C
ATOM   9181  O    GLN C 333     -6.032  78.981  27.328  1.00 28.63           O
ATOM   9182  CB   GLN C 333     -4.111  80.433  29.494  1.00 27.22           C
ATOM   9183  CG   GLN C 333     -2.769  80.367  30.188  1.00 24.27           C
ATOM   9184  CD   GLN C 333     -2.880  79.975  31.650  1.00 25.86           C
ATOM   9185  OE1  GLN C 333     -3.953  80.079  32.263  1.00 23.98           O
ATOM   9186  NE2  GLN C 333     -1.753  79.530  32.233  1.00 23.69           N
ATOM   9187  N    LYS C 334     -6.092  81.223  27.092  1.00 30.23           N
ATOM   9188  CA   LYS C 334     -7.463  81.187  26.551  1.00 32.14           C
ATOM   9189  C    LYS C 334     -7.507  80.351  25.268  1.00 31.05           C
ATOM   9190  O    LYS C 334     -8.437  79.566  25.044  1.00 31.42           O
ATOM   9191  CB   LYS C 334     -7.983  82.611  26.264  1.00 33.77           C
ATOM   9192  CG   LYS C 334     -9.468  82.642  25.894  1.00 37.64           C
ATOM   9193  CD   LYS C 334    -10.081  84.065  26.034  1.00 40.23           C
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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 9194 | CE | LYS | C | 334 | -11.567 | 84.089 | 25.624 | 1.00 | 40.44 | C |
| ATOM | 9195 | NZ | LYS | C | 334 | -12.448 | 83.239 | 26.490 | 1.00 | 41.69 | N |
| ATOM | 9196 | N | GLU | C | 335 | -6.492 | 80.525 | 24.436 | 1.00 | 31.35 | N |
| ATOM | 9197 | CA | GLU | C | 335 | -6.392 | 79.782 | 23.187 | 1.00 | 33.87 | C |
| ATOM | 9198 | C | GLU | C | 335 | -6.219 | 78.283 | 23.463 | 1.00 | 32.85 | C |
| ATOM | 9199 | O | GLU | C | 335 | -6.931 | 77.420 | 22.913 | 1.00 | 31.49 | O |
| ATOM | 9200 | CB | GLU | C | 335 | -5.190 | 80.290 | 22.400 | 1.00 | 35.43 | C |
| ATOM | 9201 | CG | GLU | C | 335 | -5.401 | 81.683 | 21.876 | 1.00 | 40.33 | C |
| ATOM | 9202 | CD | GLU | C | 335 | -6.479 | 81.717 | 20.807 | 1.00 | 43.55 | C |
| ATOM | 9203 | OE1 | GLU | C | 335 | -6.138 | 81.477 | 19.633 | 1.00 | 46.07 | O |
| ATOM | 9204 | OE2 | GLU | C | 335 | -7.665 | 81.960 | 21.141 | 1.00 | 45.50 | O |
| ATOM | 9205 | N | LEU | C | 336 | -5.256 | 77.982 | 24.326 | 1.00 | 31.59 | N |
| ATOM | 9206 | CA | LEU | C | 336 | -4.980 | 76.597 | 24.649 | 1.00 | 30.28 | C |
| ATOM | 9207 | C | LEU | C | 336 | -6.251 | 75.936 | 25.158 | 1.00 | 29.17 | C |
| ATOM | 9208 | O | LEU | C | 336 | -6.568 | 74.782 | 24.803 | 1.00 | 29.95 | O |
| ATOM | 9209 | CB | LEU | C | 336 | -3.835 | 76.519 | 25.688 | 1.00 | 30.16 | C |
| ATOM | 9210 | CG | LEU | C | 336 | -2.390 | 76.812 | 25.242 | 1.00 | 29.33 | C |
| ATOM | 9211 | CD1 | LEU | C | 336 | -1.422 | 76.629 | 26.438 | 1.00 | 30.54 | C |
| ATOM | 9212 | CD2 | LEU | C | 336 | -1.999 | 75.851 | 24.136 | 1.00 | 29.13 | C |
| ATOM | 9213 | N | ALA | C | 337 | -6.989 | 76.664 | 25.984 | 1.00 | 29.01 | N |
| ATOM | 9214 | CA | ALA | C | 337 | -8.224 | 76.132 | 26.536 | 1.00 | 30.39 | C |
| ATOM | 9215 | C | ALA | C | 337 | -9.173 | 75.692 | 25.425 | 1.00 | 30.75 | C |
| ATOM | 9216 | O | ALA | C | 337 | -9.839 | 74.672 | 25.538 | 1.00 | 31.07 | O |
| ATOM | 9217 | CB | ALA | C | 337 | -8.918 | 77.192 | 27.425 | 1.00 | 30.21 | C |
| ATOM | 9218 | N | ALA | C | 338 | -9.250 | 76.486 | 24.366 | 1.00 | 32.00 | N |
| ATOM | 9219 | CA | ALA | C | 338 | -10.163 | 76.177 | 23.261 | 1.00 | 32.83 | C |
| ATOM | 9220 | C | ALA | C | 338 | -9.762 | 74.891 | 22.551 | 1.00 | 33.18 | C |
| ATOM | 9221 | O | ALA | C | 338 | -10.583 | 74.214 | 21.922 | 1.00 | 30.97 | O |
| ATOM | 9222 | CB | ALA | C | 338 | -10.185 | 77.330 | 22.282 | 1.00 | 32.64 | C |
| ATOM | 9223 | N | MET | C | 339 | -8.485 | 74.572 | 22.649 | 1.00 | 32.67 | N |
| ATOM | 9224 | CA | MET | C | 339 | -7.967 | 73.378 | 22.038 | 1.00 | 33.89 | C |
| ATOM | 9225 | C | MET | C | 339 | -8.229 | 72.159 | 22.898 | 1.00 | 33.45 | C |
| ATOM | 9226 | O | MET | C | 339 | -8.111 | 71.036 | 22.428 | 1.00 | 33.30 | O |
| ATOM | 9227 | CB | MET | C | 339 | -6.484 | 73.526 | 21.802 | 1.00 | 34.09 | C |
| ATOM | 9228 | CG | MET | C | 339 | -6.157 | 74.461 | 20.684 | 1.00 | 35.77 | C |
| ATOM | 9229 | SD | MET | C | 339 | -4.428 | 74.773 | 20.749 | 1.00 | 39.47 | S |
| ATOM | 9230 | CE | MET | C | 339 | -4.433 | 76.600 | 20.843 | 1.00 | 39.45 | C |
| ATOM | 9231 | N | GLY | C | 340 | -8.582 | 72.378 | 24.159 | 1.00 | 32.42 | N |
| ATOM | 9232 | CA | GLY | C | 340 | -8.875 | 71.251 | 25.025 | 1.00 | 30.45 | C |
| ATOM | 9233 | C | GLY | C | 340 | -7.911 | 71.087 | 26.182 | 1.00 | 29.60 | C |
| ATOM | 9234 | O | GLY | C | 340 | -8.015 | 70.091 | 26.885 | 1.00 | 28.54 | O |
| ATOM | 9235 | N | PHE | C | 341 | -6.984 | 72.040 | 26.364 | 1.00 | 27.38 | N |
| ATOM | 9236 | CA | PHE | C | 341 | -6.017 | 72.017 | 27.483 | 1.00 | 28.14 | C |
| ATOM | 9237 | C | PHE | C | 341 | -6.785 | 72.619 | 28.630 | 1.00 | 26.65 | C |
| ATOM | 9238 | O | PHE | C | 341 | -6.881 | 73.841 | 28.746 | 1.00 | 26.29 | O |
| ATOM | 9239 | CB | PHE | C | 341 | -4.773 | 72.853 | 27.136 | 1.00 | 27.20 | C |
| ATOM | 9240 | CG | PHE | C | 341 | -3.984 | 72.269 | 26.010 | 1.00 | 28.31 | C |
| ATOM | 9241 | CD1 | PHE | C | 341 | -3.199 | 71.140 | 26.215 | 1.00 | 28.81 | C |
| ATOM | 9242 | CD2 | PHE | C | 341 | -4.130 | 72.757 | 24.707 | 1.00 | 29.17 | C |
| ATOM | 9243 | CE1 | PHE | C | 341 | -2.575 | 70.492 | 25.136 | 1.00 | 27.62 | C |
| ATOM | 9244 | CE2 | PHE | C | 341 | -3.518 | 72.122 | 23.633 | 1.00 | 28.08 | C |
| ATOM | 9245 | CZ | PHE | C | 341 | -2.739 | 70.982 | 23.847 | 1.00 | 28.69 | C |
| ATOM | 9246 | N | LYS | C | 342 | -7.368 | 71.751 | 29.455 | 1.00 | 25.48 | N |
| ATOM | 9247 | CA | LYS | C | 342 | -8.200 | 72.216 | 30.549 | 1.00 | 25.42 | C |
| ATOM | 9248 | C | LYS | C | 342 | -7.450 | 72.415 | 31.872 | 1.00 | 25.75 | C |
| ATOM | 9249 | O | LYS | C | 342 | -8.051 | 72.864 | 32.844 | 1.00 | 23.61 | O |
| ATOM | 9250 | CB | LYS | C | 342 | -9.391 | 71.265 | 30.739 | 1.00 | 26.78 | C |
| ATOM | 9251 | CG | LYS | C | 342 | -10.325 | 71.169 | 29.538 | 1.00 | 27.84 | C |
| ATOM | 9252 | CD | LYS | C | 342 | -11.084 | 72.454 | 29.336 | 1.00 | 28.96 | C |
| ATOM | 9253 | CE | LYS | C | 342 | -11.848 | 72.425 | 28.024 | 1.00 | 30.90 | C |
| ATOM | 9254 | NZ | LYS | C | 342 | -12.101 | 73.805 | 27.457 | 1.00 | 31.86 | N |
| ATOM | 9255 | N | PHE | C | 343 | -6.161 | 72.053 | 31.921 | 1.00 | 24.52 | N |
| ATOM | 9256 | CA | PHE | C | 343 | -5.383 | 72.272 | 33.133 | 1.00 | 23.31 | C |
| ATOM | 9257 | C | PHE | C | 343 | -4.087 | 72.862 | 32.672 | 1.00 | 21.61 | C |
| ATOM | 9258 | O | PHE | C | 343 | -3.333 | 72.226 | 31.936 | 1.00 | 23.05 | O |
| ATOM | 9259 | CB | PHE | C | 343 | -5.106 | 70.980 | 33.928 | 1.00 | 23.95 | C |
| ATOM | 9260 | CG | PHE | C | 343 | -4.414 | 71.240 | 35.238 | 1.00 | 25.58 | C |
| ATOM | 9261 | CD1 | PHE | C | 343 | -5.071 | 71.943 | 36.251 | 1.00 | 24.50 | C |
| ATOM | 9262 | CD2 | PHE | C | 343 | -3.075 | 70.861 | 35.435 | 1.00 | 24.48 | C |
| ATOM | 9263 | CE1 | PHE | C | 343 | -4.405 | 72.268 | 37.450 | 1.00 | 26.49 | C |
| ATOM | 9264 | CE2 | PHE | C | 343 | -2.403 | 71.182 | 36.615 | 1.00 | 24.34 | C |
| ATOM | 9265 | CZ | PHE | C | 343 | -3.059 | 71.883 | 37.627 | 1.00 | 25.67 | C |
| ATOM | 9266 | N | GLN | C | 344 | -3.843 | 74.100 | 33.088 | 1.00 | 20.20 | N |
| ATOM | 9267 | CA | GLN | C | 344 | -2.641 | 74.806 | 32.698 | 1.00 | 21.87 | C |
| ATOM | 9268 | C | GLN | C | 344 | -1.977 | 75.321 | 33.965 | 1.00 | 21.39 | C |
| ATOM | 9269 | O | GLN | C | 344 | -2.653 | 75.781 | 34.891 | 1.00 | 24.00 | O |
| ATOM | 9270 | CB | GLN | C | 344 | -2.998 | 75.966 | 31.758 | 1.00 | 22.76 | C |
| ATOM | 9271 | CG | GLN | C | 344 | -3.873 | 75.500 | 30.591 | 1.00 | 24.30 | C |
| ATOM | 9272 | CD | GLN | C | 344 | -4.114 | 76.579 | 29.528 | 1.00 | 26.08 | C |
| ATOM | 9273 | OE1 | GLN | C | 344 | -5.147 | 76.570 | 28.848 | 1.00 | 29.27 | O |

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ATOM   9274  NE2 GLN C 344      -3.163  77.471  29.359  1.00 23.24           N
ATOM   9275  N   PHE C 345      -0.660  75.296  33.974  1.00 21.64           N
ATOM   9276  CA  PHE C 345       0.084  75.659  35.167  1.00 20.87           C
ATOM   9277  C   PHE C 345       1.483  76.169  34.871  1.00 20.97           C
ATOM   9278  O   PHE C 345       2.097  75.812  33.870  1.00 23.71           O
ATOM   9279  CB  PHE C 345       0.197  74.403  36.087  1.00 20.71           C
ATOM   9280  CG  PHE C 345       0.684  73.141  35.366  1.00 21.26           C
ATOM   9281  CD1 PHE C 345      -0.144  72.465  34.473  1.00 20.87           C
ATOM   9282  CD2 PHE C 345       1.979  72.660  35.556  1.00 19.55           C
ATOM   9283  CE1 PHE C 345       0.311  71.318  33.760  1.00 20.99           C
ATOM   9284  CE2 PHE C 345       2.440  71.535  34.870  1.00 23.24           C
ATOM   9285  CZ  PHE C 345       1.607  70.856  33.964  1.00 22.94           C
ATOM   9286  N   ILE C 346       1.965  77.049  35.740  1.00 22.30           N
ATOM   9287  CA  ILE C 346       3.330  77.557  35.651  1.00 21.24           C
ATOM   9288  C   ILE C 346       4.067  76.794  36.771  1.00 21.82           C
ATOM   9289  O   ILE C 346       3.948  77.108  37.955  1.00 20.88           O
ATOM   9290  CB  ILE C 346       3.408  79.058  35.911  1.00 19.31           C
ATOM   9291  CG1 ILE C 346       2.542  79.821  34.883  1.00 19.42           C
ATOM   9292  CG2 ILE C 346       4.847  79.503  35.764  1.00 18.92           C
ATOM   9293  CD1 ILE C 346       2.450  81.351  35.126  1.00 17.14           C
ATOM   9294  N   THR C 347       4.788  75.758  36.370  1.00 21.51           N
ATOM   9295  CA  THR C 347       5.493  74.891  37.309  1.00 20.68           C
ATOM   9296  C   THR C 347       6.356  75.573  38.365  1.00 21.34           C
ATOM   9297  O   THR C 347       6.208  75.290  39.569  1.00 19.09           O
ATOM   9298  CB  THR C 347       6.371  73.972  36.543  1.00 20.94           C
ATOM   9299  OG1 THR C 347       7.101  74.760  35.598  1.00 23.61           O
ATOM   9300  CG2 THR C 347       5.519  72.882  35.776  1.00 17.98           C
ATOM   9301  N   LEU C 348       7.256  76.458  37.913  1.00 21.08           N
ATOM   9302  CA  LEU C 348       8.204  77.126  38.822  1.00 20.19           C
ATOM   9303  C   LEU C 348       7.873  78.552  39.287  1.00 21.15           C
ATOM   9304  O   LEU C 348       8.762  79.314  39.646  1.00 20.26           O
ATOM   9305  CB  LEU C 348       9.591  77.128  38.190  1.00 21.61           C
ATOM   9306  CG  LEU C 348      10.030  75.827  37.513  1.00 23.71           C
ATOM   9307  CD1 LEU C 348      11.529  75.914  37.140  1.00 23.17           C
ATOM   9308  CD2 LEU C 348       9.783  74.658  38.487  1.00 21.47           C
ATOM   9309  N   ALA C 349       6.595  78.885  39.334  1.00 21.00           N
ATOM   9310  CA  ALA C 349       6.161  80.215  39.775  1.00 21.13           C
ATOM   9311  C   ALA C 349       6.600  80.575  41.216  1.00 21.77           C
ATOM   9312  O   ALA C 349       7.019  81.715  41.504  1.00 23.02           O
ATOM   9313  CB  ALA C 349       4.623  80.296  39.668  1.00 20.82           C
ATOM   9314  N   GLY C 350       6.483  79.599  42.115  1.00 22.21           N
ATOM   9315  CA  GLY C 350       6.818  79.814  43.508  1.00 19.21           C
ATOM   9316  C   GLY C 350       8.292  80.066  43.628  1.00 21.04           C
ATOM   9317  O   GLY C 350       8.683  81.015  44.302  1.00 22.82           O
ATOM   9318  N   PHE C 351       9.110  79.231  42.986  1.00 19.42           N
ATOM   9319  CA  PHE C 351      10.565  79.411  43.034  1.00 20.22           C
ATOM   9320  C   PHE C 351      10.933  80.833  42.612  1.00 21.62           C
ATOM   9321  O   PHE C 351      11.745  81.524  43.241  1.00 21.55           O
ATOM   9322  CB  PHE C 351      11.251  78.442  42.060  1.00 19.73           C
ATOM   9323  CG  PHE C 351      12.737  78.678  41.893  1.00 21.08           C
ATOM   9324  CD1 PHE C 351      13.655  78.177  42.824  1.00 22.77           C
ATOM   9325  CD2 PHE C 351      13.228  79.411  40.807  1.00 21.71           C
ATOM   9326  CE1 PHE C 351      15.045  78.394  42.670  1.00 21.96           C
ATOM   9327  CE2 PHE C 351      14.618  79.631  40.651  1.00 21.02           C
ATOM   9328  CZ  PHE C 351      15.514  79.132  41.560  1.00 22.04           C
ATOM   9329  N   HIS C 352      10.372  81.258  41.493  1.00 20.85           N
ATOM   9330  CA  HIS C 352      10.727  82.575  40.996  1.00 21.33           C
ATOM   9331  C   HIS C 352      10.230  83.718  41.843  1.00 21.14           C
ATOM   9332  O   HIS C 352      10.977  84.661  42.085  1.00 23.44           O
ATOM   9333  CB  HIS C 352      10.316  82.697  39.526  1.00 19.20           C
ATOM   9334  CG  HIS C 352      11.243  81.957  38.610  1.00 20.25           C
ATOM   9335  ND1 HIS C 352      12.576  82.296  38.476  1.00 16.78           N
ATOM   9336  CD2 HIS C 352      11.074  80.814  37.894  1.00 19.03           C
ATOM   9337  CE1 HIS C 352      13.184  81.391  37.724  1.00 16.85           C
ATOM   9338  NE2 HIS C 352      12.296  80.483  37.360  1.00 19.24           N
ATOM   9339  N   ALA C 353       9.009  83.625  42.349  1.00 19.74           N
ATOM   9340  CA  ALA C 353       8.466  84.693  43.151  1.00 21.20           C
ATOM   9341  C   ALA C 353       9.248  84.787  44.454  1.00 23.09           C
ATOM   9342  O   ALA C 353       9.544  85.893  44.935  1.00 22.75           O
ATOM   9343  CB  ALA C 353       6.960  84.459  43.423  1.00 17.88           C
ATOM   9344  N   LEU C 354       9.589  83.630  45.028  1.00 21.78           N
ATOM   9345  CA  LEU C 354      10.361  83.608  46.262  1.00 22.39           C
ATOM   9346  C   LEU C 354      11.801  84.110  46.086  1.00 21.70           C
ATOM   9347  O   LEU C 354      12.262  84.942  46.840  1.00 24.93           O
ATOM   9348  CB  LEU C 354      10.382  82.173  46.833  1.00 22.12           C
ATOM   9349  CG  LEU C 354      11.109  81.941  48.169  1.00 23.24           C
ATOM   9350  CD1 LEU C 354      10.582  80.625  48.766  1.00 24.02           C
ATOM   9351  CD2 LEU C 354      12.620  81.846  47.991  1.00 20.40           C
ATOM   9352  N   ASN C 355      12.512  83.601  45.098  1.00 23.25           N
ATOM   9353  CA  ASN C 355      13.885  84.003  44.917  1.00 23.98           C
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| ATOM | 9354 | C   | ASN C 355 | 13.967 | 85.454 | 44.489 | 1.00 | 25.43 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 9355 | O   | ASN C 355 | 14.863 | 86.182 | 44.941 | 1.00 | 27.70 | O |
| ATOM | 9356 | CB  | ASN C 355 | 14.587 | 83.128 | 43.894 | 1.00 | 22.62 | C |
| ATOM | 9357 | CG  | ASN C 355 | 15.136 | 81.844 | 44.509 | 1.00 | 25.72 | C |
| ATOM | 9358 | OD1 | ASN C 355 | 16.298 | 81.781 | 44.947 | 1.00 | 23.55 | O |
| ATOM | 9359 | ND2 | ASN C 355 | 14.294 | 80.816 | 44.557 | 1.00 | 22.46 | N |
| ATOM | 9360 | N   | TYR C 356 | 13.038 | 85.903 | 43.650 | 1.00 | 25.45 | N |
| ATOM | 9361 | CA  | TYR C 356 | 13.135 | 87.301 | 43.227 | 1.00 | 26.60 | C |
| ATOM | 9362 | C   | TYR C 356 | 12.731 | 88.259 | 44.338 | 1.00 | 27.07 | C |
| ATOM | 9363 | O   | TYR C 356 | 13.413 | 89.240 | 44.603 | 1.00 | 27.21 | O |
| ATOM | 9364 | CB  | TYR C 356 | 12.284 | 87.593 | 41.980 | 1.00 | 26.48 | C |
| ATOM | 9365 | CG  | TYR C 356 | 12.432 | 89.050 | 41.571 | 1.00 | 26.17 | C |
| ATOM | 9366 | CD1 | TYR C 356 | 13.637 | 89.517 | 41.039 | 1.00 | 27.96 | C |
| ATOM | 9367 | CD2 | TYR C 356 | 11.431 | 89.970 | 41.854 | 1.00 | 27.09 | C |
| ATOM | 9368 | CE1 | TYR C 356 | 13.846 | 90.878 | 40.802 | 1.00 | 27.33 | C |
| ATOM | 9369 | CE2 | TYR C 356 | 11.624 | 91.340 | 41.626 | 1.00 | 30.90 | C |
| ATOM | 9370 | CZ  | TYR C 356 | 12.837 | 91.784 | 41.093 | 1.00 | 29.82 | C |
| ATOM | 9371 | OH  | TYR C 356 | 13.010 | 93.134 | 40.819 | 1.00 | 31.26 | O |
| ATOM | 9372 | N   | SER C 357 | 11.614 | 87.977 | 44.994 | 1.00 | 28.84 | N |
| ATOM | 9373 | CA  | SER C 357 | 11.153 | 88.859 | 46.043 | 1.00 | 28.32 | C |
| ATOM | 9374 | C   | SER C 357 | 12.188 | 89.013 | 47.147 | 1.00 | 29.35 | C |
| ATOM | 9375 | O   | SER C 357 | 12.337 | 90.113 | 47.706 | 1.00 | 29.29 | O |
| ATOM | 9376 | CB  | SER C 357 | 9.823  | 88.367 | 46.615 | 1.00 | 29.75 | C |
| ATOM | 9377 | OG  | SER C 357 | 9.961  | 87.086 | 47.190 | 1.00 | 31.52 | O |
| ATOM | 9378 | N   | MET C 358 | 12.933 | 87.953 | 47.463 | 1.00 | 29.77 | N |
| ATOM | 9379 | CA  | MET C 358 | 13.912 | 88.090 | 48.529 | 1.00 | 28.24 | C |
| ATOM | 9380 | C   | MET C 358 | 15.143 | 88.846 | 48.071 | 1.00 | 28.69 | C |
| ATOM | 9381 | O   | MET C 358 | 15.647 | 89.717 | 48.792 | 1.00 | 28.57 | O |
| ATOM | 9382 | CB  | MET C 358 | 14.335 | 86.737 | 49.104 | 1.00 | 28.22 | C |
| ATOM | 9383 | CG  | MET C 358 | 15.242 | 86.839 | 50.350 | 1.00 | 28.21 | C |
| ATOM | 9384 | SD  | MET C 358 | 14.618 | 88.030 | 51.602 | 1.00 | 28.01 | S |
| ATOM | 9385 | CE  | MET C 358 | 13.142 | 87.188 | 52.347 | 1.00 | 27.42 | C |
| ATOM | 9386 | N   | PHE C 359 | 15.650 | 88.505 | 46.892 | 1.00 | 29.36 | N |
| ATOM | 9387 | CA  | PHE C 359 | 16.845 | 89.184 | 46.388 | 1.00 | 28.30 | C |
| ATOM | 9388 | C   | PHE C 359 | 16.552 | 90.682 | 46.336 | 1.00 | 27.92 | C |
| ATOM | 9389 | O   | PHE C 359 | 17.372 | 91.495 | 46.750 | 1.00 | 25.74 | O |
| ATOM | 9390 | CB  | PHE C 359 | 17.233 | 88.685 | 44.996 | 1.00 | 27.54 | C |
| ATOM | 9391 | CG  | PHE C 359 | 18.305 | 89.516 | 44.343 | 1.00 | 27.38 | C |
| ATOM | 9392 | CD1 | PHE C 359 | 17.990 | 90.743 | 43.760 | 1.00 | 27.30 | C |
| ATOM | 9393 | CD2 | PHE C 359 | 19.625 | 89.101 | 44.352 | 1.00 | 28.00 | C |
| ATOM | 9394 | CE1 | PHE C 359 | 18.992 | 91.553 | 43.196 | 1.00 | 27.23 | C |
| ATOM | 9395 | CE2 | PHE C 359 | 20.639 | 89.897 | 43.788 | 1.00 | 28.17 | C |
| ATOM | 9396 | CZ  | PHE C 359 | 20.315 | 91.128 | 43.211 | 1.00 | 26.83 | C |
| ATOM | 9397 | N   | ASP C 360 | 15.365 | 91.034 | 45.853 | 1.00 | 28.28 | N |
| ATOM | 9398 | CA  | ASP C 360 | 14.974 | 92.428 | 45.756 | 1.00 | 29.21 | C |
| ATOM | 9399 | C   | ASP C 360 | 14.987 | 93.090 | 47.136 | 1.00 | 30.41 | C |
| ATOM | 9400 | O   | ASP C 360 | 15.528 | 94.193 | 47.311 | 1.00 | 31.24 | O |
| ATOM | 9401 | CB  | ASP C 360 | 13.566 | 92.561 | 45.170 | 1.00 | 30.52 | C |
| ATOM | 9402 | CG  | ASP C 360 | 13.223 | 94.014 | 44.830 | 1.00 | 32.34 | C |
| ATOM | 9403 | OD1 | ASP C 360 | 14.111 | 94.655 | 44.224 | 1.00 | 32.00 | O |
| ATOM | 9404 | OD2 | ASP C 360 | 12.097 | 94.496 | 45.160 | 1.00 | 30.25 | O |
| ATOM | 9405 | N   | LEU C 361 | 14.360 | 92.427 | 48.105 | 1.00 | 29.64 | N |
| ATOM | 9406 | CA  | LEU C 361 | 14.273 | 92.963 | 49.455 | 1.00 | 28.94 | C |
| ATOM | 9407 | C   | LEU C 361 | 15.674 | 93.119 | 50.018 | 1.00 | 27.62 | C |
| ATOM | 9408 | O   | LEU C 361 | 16.054 | 94.205 | 50.466 | 1.00 | 27.10 | O |
| ATOM | 9409 | CB  | LEU C 361 | 13.435 | 92.044 | 50.359 | 1.00 | 28.81 | C |
| ATOM | 9410 | CG  | LEU C 361 | 13.319 | 92.440 | 51.844 | 1.00 | 28.45 | C |
| ATOM | 9411 | CD1 | LEU C 361 | 12.808 | 93.877 | 51.939 | 1.00 | 27.53 | C |
| ATOM | 9412 | CD2 | LEU C 361 | 12.354 | 91.483 | 52.562 | 1.00 | 27.85 | C |
| ATOM | 9413 | N   | ALA C 362 | 16.443 | 92.043 | 49.956 | 1.00 | 26.51 | N |
| ATOM | 9414 | CA  | ALA C 362 | 17.792 | 92.009 | 50.490 | 1.00 | 27.62 | C |
| ATOM | 9415 | C   | ALA C 362 | 18.747 | 92.996 | 49.827 | 1.00 | 28.76 | C |
| ATOM | 9416 | O   | ALA C 362 | 19.684 | 93.508 | 50.456 | 1.00 | 28.38 | O |
| ATOM | 9417 | CB  | ALA C 362 | 18.354 | 90.609 | 50.380 | 1.00 | 26.37 | C |
| ATOM | 9418 | N   | TYR C 363 | 18.535 | 93.224 | 48.543 | 1.00 | 30.30 | N |
| ATOM | 9419 | CA  | TYR C 363 | 19.392 | 94.147 | 47.809 | 1.00 | 30.82 | C |
| ATOM | 9420 | C   | TYR C 363 | 19.089 | 95.547 | 48.317 | 1.00 | 30.28 | C |
| ATOM | 9421 | O   | TYR C 363 | 19.990 | 96.305 | 48.648 | 1.00 | 31.79 | O |
| ATOM | 9422 | CB  | TYR C 363 | 19.103 | 94.063 | 46.318 | 1.00 | 32.57 | C |
| ATOM | 9423 | CG  | TYR C 363 | 20.079 | 94.900 | 45.510 | 1.00 | 35.71 | C |
| ATOM | 9424 | CD1 | TYR C 363 | 21.395 | 94.473 | 45.309 | 1.00 | 34.29 | C |
| ATOM | 9425 | CD2 | TYR C 363 | 19.703 | 96.153 | 45.021 | 1.00 | 35.36 | C |
| ATOM | 9426 | CE1 | TYR C 363 | 22.299 | 95.257 | 44.654 | 1.00 | 36.09 | C |
| ATOM | 9427 | CE2 | TYR C 363 | 20.613 | 96.957 | 44.357 | 1.00 | 36.71 | C |
| ATOM | 9428 | CZ  | TYR C 363 | 21.905 | 96.504 | 44.175 | 1.00 | 36.97 | C |
| ATOM | 9429 | OH  | TYR C 363 | 22.794 | 97.296 | 43.485 | 1.00 | 37.98 | O |
| ATOM | 9430 | N   | GLY C 364 | 17.799 | 95.871 | 48.398 | 1.00 | 30.55 | N |
| ATOM | 9431 | CA  | GLY C 364 | 17.387 | 97.177 | 48.874 | 1.00 | 30.05 | C |
| ATOM | 9432 | C   | GLY C 364 | 17.688 | 97.412 | 50.344 | 1.00 | 31.29 | C |
| ATOM | 9433 | O   | GLY C 364 | 17.897 | 98.567 | 50.754 | 1.00 | 30.97 | O |

| ATOM | 9434 | N   | TYR | C | 365 | 17.711 | 96.334  | 51.131 | 1.00 | 29.23 | N |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 9435 | CA  | TYR | C | 365 | 17.978 | 96.384  | 52.584 | 1.00 | 30.14 | C |
| ATOM | 9436 | C   | TYR | C | 365 | 19.453 | 96.605  | 52.809 | 1.00 | 30.68 | C |
| ATOM | 9437 | O   | TYR | C | 365 | 19.844 | 97.348  | 53.722 | 1.00 | 31.81 | O |
| ATOM | 9438 | CB  | TYR | C | 365 | 17.554 | 95.048  | 53.246 | 1.00 | 30.10 | C |
| ATOM | 9439 | CG  | TYR | C | 365 | 17.842 | 94.882  | 54.739 | 1.00 | 30.12 | C |
| ATOM | 9440 | CD1 | TYR | C | 365 | 17.146 | 95.628  | 55.697 | 1.00 | 31.17 | C |
| ATOM | 9441 | CD2 | TYR | C | 365 | 18.728 | 93.898  | 55.190 | 1.00 | 31.56 | C |
| ATOM | 9442 | CE1 | TYR | C | 365 | 17.308 | 95.389  | 57.076 | 1.00 | 31.70 | C |
| ATOM | 9443 | CE2 | TYR | C | 365 | 18.901 | 93.647  | 56.569 | 1.00 | 31.62 | C |
| ATOM | 9444 | CZ  | TYR | C | 365 | 18.179 | 94.396  | 57.499 | 1.00 | 30.70 | C |
| ATOM | 9445 | OH  | TYR | C | 365 | 18.301 | 94.123  | 58.845 | 1.00 | 31.76 | O |
| ATOM | 9446 | N   | ALA | C | 366 | 20.280 | 95.958  | 51.990 | 1.00 | 30.41 | N |
| ATOM | 9447 | CA  | ALA | C | 366 | 21.715 | 96.107  | 52.124 | 1.00 | 32.17 | C |
| ATOM | 9448 | C   | ALA | C | 366 | 22.098 | 97.561  | 51.824 | 1.00 | 34.76 | C |
| ATOM | 9449 | O   | ALA | C | 366 | 23.140 | 98.035  | 52.286 | 1.00 | 35.82 | O |
| ATOM | 9450 | CB  | ALA | C | 366 | 22.441 | 95.194  | 51.161 | 1.00 | 31.13 | C |
| ATOM | 9451 | N   | GLN | C | 367 | 21.268 | 98.264  | 51.052 | 1.00 | 36.22 | N |
| ATOM | 9452 | CA  | GLN | C | 367 | 21.581 | 99.666  | 50.706 | 1.00 | 37.59 | C |
| ATOM | 9453 | C   | GLN | C | 367 | 20.899 | 100.687 | 51.611 | 1.00 | 37.13 | C |
| ATOM | 9454 | O   | GLN | C | 367 | 21.549 | 101.556 | 52.187 | 1.00 | 38.32 | O |
| ATOM | 9455 | CB  | GLN | C | 367 | 21.153 | 99.970  | 49.263 | 1.00 | 38.93 | C |
| ATOM | 9456 | CG  | GLN | C | 367 | 21.693 | 99.016  | 48.190 | 1.00 | 42.98 | C |
| ATOM | 9457 | CD  | GLN | C | 367 | 23.198 | 99.088  | 48.051 | 1.00 | 44.81 | C |
| ATOM | 9458 | OE1 | GLN | C | 367 | 23.730 | 99.466  | 46.994 | 1.00 | 47.23 | O |
| ATOM | 9459 | NE2 | GLN | C | 367 | 23.899 | 98.733  | 49.122 | 1.00 | 46.03 | N |
| ATOM | 9460 | N   | ASN | C | 368 | 19.580 | 100.578 | 51.728 | 1.00 | 36.89 | N |
| ATOM | 9461 | CA  | ASN | C | 368 | 18.790 | 101.523 | 52.501 | 1.00 | 37.00 | C |
| ATOM | 9462 | C   | ASN | C | 368 | 18.096 | 100.995 | 53.776 | 1.00 | 35.69 | C |
| ATOM | 9463 | O   | ASN | C | 368 | 17.140 | 101.621 | 54.270 | 1.00 | 33.23 | O |
| ATOM | 9464 | CB  | ASN | C | 368 | 17.735 | 102.143 | 51.576 | 1.00 | 39.47 | C |
| ATOM | 9465 | CG  | ASN | C | 368 | 18.312 | 102.585 | 50.237 | 1.00 | 42.34 | C |
| ATOM | 9466 | OD1 | ASN | C | 368 | 18.622 | 101.759 | 49.372 | 1.00 | 44.37 | O |
| ATOM | 9467 | ND2 | ASN | C | 368 | 18.464 | 103.897 | 50.061 | 1.00 | 44.07 | N |
| ATOM | 9468 | N   | GLN | C | 369 | 18.555 | 99.848  | 54.290 | 1.00 | 34.78 | N |
| ATOM | 9469 | CA  | GLN | C | 369 | 17.991 | 99.253  | 55.500 | 1.00 | 32.84 | C |
| ATOM | 9470 | C   | GLN | C | 369 | 16.478 | 99.412  | 55.651 | 1.00 | 32.30 | C |
| ATOM | 9471 | O   | GLN | C | 369 | 15.728 | 99.036  | 54.754 | 1.00 | 32.14 | O |
| ATOM | 9472 | CB  | GLN | C | 369 | 18.699 | 99.798  | 56.742 | 1.00 | 33.64 | C |
| ATOM | 9473 | CG  | GLN | C | 369 | 20.179 | 99.418  | 56.838 | 1.00 | 35.27 | C |
| ATOM | 9474 | CD  | GLN | C | 369 | 21.077 | 100.158 | 55.846 | 1.00 | 38.89 | C |
| ATOM | 9475 | OE1 | GLN | C | 369 | 20.853 | 100.121 | 54.637 | 1.00 | 41.14 | O |
| ATOM | 9476 | NE2 | GLN | C | 369 | 22.111 | 100.819 | 56.359 | 1.00 | 39.42 | N |
| ATOM | 9477 | N   | MET | C | 370 | 16.004 | 99.995  | 56.751 | 1.00 | 30.92 | N |
| ATOM | 9478 | CA  | MET | C | 370 | 14.555 | 100.058 | 56.938 | 1.00 | 30.02 | C |
| ATOM | 9479 | C   | MET | C | 370 | 13.698 | 100.635 | 55.816 | 1.00 | 30.34 | C |
| ATOM | 9480 | O   | MET | C | 370 | 12.543 | 100.229 | 55.651 | 1.00 | 30.47 | O |
| ATOM | 9481 | CB  | MET | C | 370 | 14.183 | 100.741 | 58.270 | 1.00 | 29.44 | C |
| ATOM | 9482 | CG  | MET | C | 370 | 14.587 | 99.969  | 59.535 | 1.00 | 29.37 | C |
| ATOM | 9483 | SD  | MET | C | 370 | 14.328 | 98.131  | 59.393 | 1.00 | 28.30 | S |
| ATOM | 9484 | CE  | MET | C | 370 | 12.644 | 98.063  | 59.243 | 1.00 | 23.23 | C |
| ATOM | 9485 | N   | SER | C | 371 | 14.245 | 101.570 | 55.041 | 1.00 | 30.76 | N |
| ATOM | 9486 | CA  | SER | C | 371 | 13.502 | 102.183 | 53.937 | 1.00 | 30.60 | C |
| ATOM | 9487 | C   | SER | C | 371 | 12.973 | 101.095 | 52.980 | 1.00 | 30.48 | C |
| ATOM | 9488 | O   | SER | C | 371 | 11.794 | 101.116 | 52.578 | 1.00 | 30.85 | O |
| ATOM | 9489 | CB  | SER | C | 371 | 14.428 | 103.163 | 53.172 | 1.00 | 32.29 | C |
| ATOM | 9490 | OG  | SER | C | 371 | 15.349 | 103.817 | 54.055 | 1.00 | 34.44 | O |
| ATOM | 9491 | N   | ALA | C | 372 | 13.854 | 100.162 | 52.610 | 1.00 | 29.89 | N |
| ATOM | 9492 | CA  | ALA | C | 372 | 13.496 | 99.034  | 51.724 | 1.00 | 31.23 | C |
| ATOM | 9493 | C   | ALA | C | 372 | 12.321 | 98.211  | 52.275 | 1.00 | 31.42 | C |
| ATOM | 9494 | O   | ALA | C | 372 | 11.323 | 97.937  | 51.557 | 1.00 | 31.68 | O |
| ATOM | 9495 | CB  | ALA | C | 372 | 14.712 | 98.125  | 51.527 | 1.00 | 31.17 | C |
| ATOM | 9496 | N   | TYR | C | 373 | 12.420 | 97.812  | 53.542 | 1.00 | 30.41 | N |
| ATOM | 9497 | CA  | TYR | C | 373 | 11.352 | 97.021  | 54.133 | 1.00 | 29.05 | C |
| ATOM | 9498 | C   | TYR | C | 373 | 10.078 | 97.843  | 54.182 | 1.00 | 29.47 | C |
| ATOM | 9499 | O   | TYR | C | 373 | 8.970  | 97.358  | 53.924 | 1.00 | 29.62 | O |
| ATOM | 9500 | CB  | TYR | C | 373 | 11.697 | 96.555  | 55.560 | 1.00 | 28.07 | C |
| ATOM | 9501 | CG  | TYR | C | 373 | 10.684 | 95.534  | 56.039 | 1.00 | 27.71 | C |
| ATOM | 9502 | CD1 | TYR | C | 373 | 10.699 | 94.236  | 55.522 | 1.00 | 28.18 | C |
| ATOM | 9503 | CD2 | TYR | C | 373 | 9.598  | 95.912  | 56.823 | 1.00 | 27.11 | C |
| ATOM | 9504 | CE1 | TYR | C | 373 | 9.660  | 93.353  | 55.749 | 1.00 | 26.95 | C |
| ATOM | 9505 | CE2 | TYR | C | 373 | 8.541  | 95.027  | 57.049 | 1.00 | 29.03 | C |
| ATOM | 9506 | CZ  | TYR | C | 373 | 8.588  | 93.751  | 56.497 | 1.00 | 29.57 | C |
| ATOM | 9507 | OH  | TYR | C | 373 | 7.524  | 92.883  | 56.649 | 1.00 | 31.70 | O |
| ATOM | 9508 | N   | VAL | C | 374 | 10.224 | 99.117  | 54.518 | 1.00 | 30.55 | N |
| ATOM | 9509 | CA  | VAL | C | 374 | 9.036  | 99.938  | 54.600 | 1.00 | 29.94 | C |
| ATOM | 9510 | C   | VAL | C | 374 | 8.323  | 99.982  | 53.265 | 1.00 | 29.38 | C |
| ATOM | 9511 | O   | VAL | C | 374 | 7.097  | 99.991  | 53.211 | 1.00 | 30.14 | O |
| ATOM | 9512 | CB  | VAL | C | 374 | 9.391  | 101.330 | 55.123 | 1.00 | 30.81 | C |
| ATOM | 9513 | CG1 | VAL | C | 374 | 8.133  | 102.219 | 55.138 | 1.00 | 31.23 | C |

| ATOM | 9514 | CG2 | VAL | C | 374 | 9.936 | 101.176 | 56.527 | 1.00 | 30.15 | C |
|------|------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 9515 | N | GLU | C | 375 | 9.091 | 99.967 | 52.185 | 1.00 | 30.70 | N |
| ATOM | 9516 | CA | GLU | C | 375 | 8.501 | 99.970 | 50.853 | 1.00 | 32.20 | C |
| ATOM | 9517 | C | GLU | C | 375 | 7.609 | 98.742 | 50.708 | 1.00 | 30.66 | C |
| ATOM | 9518 | O | GLU | C | 375 | 6.476 | 98.811 | 50.219 | 1.00 | 31.04 | O |
| ATOM | 9519 | CB | GLU | C | 375 | 9.604 | 99.929 | 49.792 | 1.00 | 34.51 | C |
| ATOM | 9520 | CG | GLU | C | 375 | 10.134 | 101.288 | 49.381 | 1.00 | 39.85 | C |
| ATOM | 9521 | CD | GLU | C | 375 | 11.477 | 101.213 | 48.656 | 1.00 | 43.12 | C |
| ATOM | 9522 | OE1 | GLU | C | 375 | 11.562 | 100.516 | 47.612 | 1.00 | 46.13 | O |
| ATOM | 9523 | OE2 | GLU | C | 375 | 12.449 | 101.858 | 49.123 | 1.00 | 44.46 | O |
| ATOM | 9524 | N | LEU | C | 376 | 8.115 | 97.606 | 51.172 | 1.00 | 31.65 | N |
| ATOM | 9525 | CA | LEU | C | 376 | 7.341 | 96.377 | 51.058 | 1.00 | 28.46 | C |
| ATOM | 9526 | C | LEU | C | 376 | 6.069 | 96.458 | 51.882 | 1.00 | 29.01 | C |
| ATOM | 9527 | O | LEU | C | 376 | 4.998 | 96.141 | 51.377 | 1.00 | 31.24 | O |
| ATOM | 9528 | CB | LEU | C | 376 | 8.195 | 95.196 | 51.494 | 1.00 | 27.98 | C |
| ATOM | 9529 | CG | LEU | C | 376 | 7.495 | 93.837 | 51.543 | 1.00 | 27.07 | C |
| ATOM | 9530 | CD1 | LEU | C | 376 | 6.941 | 93.459 | 50.156 | 1.00 | 26.34 | C |
| ATOM | 9531 | CD2 | LEU | C | 376 | 8.488 | 92.801 | 52.043 | 1.00 | 26.77 | C |
| ATOM | 9532 | N | GLN | C | 377 | 6.174 | 96.929 | 53.132 | 1.00 | 30.46 | N |
| ATOM | 9533 | CA | GLN | C | 377 | 5.006 | 97.030 | 54.026 | 1.00 | 31.54 | C |
| ATOM | 9534 | C | GLN | C | 377 | 3.823 | 97.879 | 53.520 | 1.00 | 31.18 | C |
| ATOM | 9535 | O | GLN | C | 377 | 2.659 | 97.502 | 53.699 | 1.00 | 31.58 | O |
| ATOM | 9536 | CB | GLN | C | 377 | 5.451 | 97.514 | 55.418 | 1.00 | 32.09 | C |
| ATOM | 9537 | CG | GLN | C | 377 | 4.441 | 97.223 | 56.515 | 1.00 | 34.24 | C |
| ATOM | 9538 | CD | GLN | C | 377 | 4.969 | 97.540 | 57.902 | 1.00 | 37.44 | C |
| ATOM | 9539 | OE1 | GLN | C | 377 | 4.585 | 96.884 | 58.879 | 1.00 | 38.32 | O |
| ATOM | 9540 | NE2 | GLN | C | 377 | 5.856 | 98.550 | 58.002 | 1.00 | 36.10 | N |
| ATOM | 9541 | N | GLU | C | 378 | 4.096 | 99.014 | 52.886 | 1.00 | 32.42 | N |
| ATOM | 9542 | CA | GLU | C | 378 | 3.001 | 99.843 | 52.372 | 1.00 | 33.27 | C |
| ATOM | 9543 | C | GLU | C | 378 | 2.319 | 99.143 | 51.188 | 1.00 | 33.09 | C |
| ATOM | 9544 | O | GLU | C | 378 | 1.079 | 99.230 | 50.988 | 1.00 | 33.50 | O |
| ATOM | 9545 | CB | GLU | C | 378 | 3.529 | 101.222 | 51.950 | 1.00 | 36.07 | C |
| ATOM | 9546 | CG | GLU | C | 378 | 4.095 | 102.065 | 53.131 | 1.00 | 38.56 | C |
| ATOM | 9547 | CD | GLU | C | 378 | 3.092 | 102.235 | 54.279 | 1.00 | 41.28 | C |
| ATOM | 9548 | OE1 | GLU | C | 378 | 1.904 | 102.580 | 54.011 | 1.00 | 41.23 | O |
| ATOM | 9549 | OE2 | GLU | C | 378 | 3.495 | 102.035 | 55.457 | 1.00 | 42.02 | O |
| ATOM | 9550 | N | ARG | C | 379 | 3.123 | 98.424 | 50.419 | 1.00 | 32.72 | N |
| ATOM | 9551 | CA | ARG | C | 379 | 2.611 | 97.670 | 49.281 | 1.00 | 31.86 | C |
| ATOM | 9552 | C | ARG | C | 379 | 1.576 | 96.655 | 49.766 | 1.00 | 30.45 | C |
| ATOM | 9553 | O | ARG | C | 379 | 0.561 | 96.423 | 49.092 | 1.00 | 29.07 | O |
| ATOM | 9554 | CB | ARG | C | 379 | 3.762 | 96.979 | 48.575 | 1.00 | 33.26 | C |
| ATOM | 9555 | CG | ARG | C | 379 | 4.843 | 97.960 | 48.197 | 1.00 | 37.27 | C |
| ATOM | 9556 | CD | ARG | C | 379 | 5.618 | 97.562 | 46.961 | 1.00 | 39.12 | C |
| ATOM | 9557 | NE | ARG | C | 379 | 6.686 | 96.633 | 47.290 | 1.00 | 44.07 | N |
| ATOM | 9558 | CZ | ARG | C | 379 | 7.817 | 96.522 | 46.600 | 1.00 | 45.33 | C |
| ATOM | 9559 | NH1 | ARG | C | 379 | 8.021 | 97.289 | 45.534 | 1.00 | 45.37 | N |
| ATOM | 9560 | NH2 | ARG | C | 379 | 8.749 | 95.656 | 46.982 | 1.00 | 47.06 | N |
| ATOM | 9561 | N | GLU | C | 380 | 1.847 | 96.075 | 50.944 | 1.00 | 29.89 | N |
| ATOM | 9562 | CA | GLU | C | 380 | 0.967 | 95.102 | 51.578 | 1.00 | 29.32 | C |
| ATOM | 9563 | C | GLU | C | 380 | -0.304 | 95.785 | 52.054 | 1.00 | 29.05 | C |
| ATOM | 9564 | O | GLU | C | 380 | -1.417 | 95.271 | 51.869 | 1.00 | 29.08 | O |
| ATOM | 9565 | CB | GLU | C | 380 | 1.693 | 94.409 | 52.755 | 1.00 | 30.80 | C |
| ATOM | 9566 | CG | GLU | C | 380 | 2.946 | 93.608 | 52.324 | 1.00 | 29.88 | C |
| ATOM | 9567 | CD | GLU | C | 380 | 3.571 | 92.786 | 53.461 | 1.00 | 33.42 | C |
| ATOM | 9568 | OE1 | GLU | C | 380 | 3.006 | 91.719 | 53.804 | 1.00 | 30.45 | O |
| ATOM | 9569 | OE2 | GLU | C | 380 | 4.623 | 93.213 | 54.013 | 1.00 | 34.18 | O |
| ATOM | 9570 | N | PHE | C | 381 | -0.159 | 96.953 | 52.669 | 1.00 | 29.64 | N |
| ATOM | 9571 | CA | PHE | C | 381 | -1.354 | 97.668 | 53.103 | 1.00 | 31.29 | C |
| ATOM | 9572 | C | PHE | C | 381 | -2.135 | 97.977 | 51.820 | 1.00 | 31.00 | C |
| ATOM | 9573 | O | PHE | C | 381 | -3.356 | 97.827 | 51.765 | 1.00 | 32.31 | O |
| ATOM | 9574 | CB | PHE | C | 381 | -0.996 | 98.984 | 53.810 | 1.00 | 32.62 | C |
| ATOM | 9575 | CG | PHE | C | 381 | -0.370 | 98.804 | 55.176 | 1.00 | 35.03 | C |
| ATOM | 9576 | CD1 | PHE | C | 381 | -1.001 | 98.039 | 56.153 | 1.00 | 34.27 | C |
| ATOM | 9577 | CD2 | PHE | C | 381 | 0.827 | 99.441 | 55.491 | 1.00 | 34.63 | C |
| ATOM | 9578 | CE1 | PHE | C | 381 | -0.456 | 97.917 | 57.419 | 1.00 | 35.78 | C |
| ATOM | 9579 | CE2 | PHE | C | 381 | 1.381 | 99.323 | 56.768 | 1.00 | 35.67 | C |
| ATOM | 9580 | CZ | PHE | C | 381 | 0.742 | 98.565 | 57.727 | 1.00 | 35.27 | C |
| ATOM | 9581 | N | ALA | C | 382 | -1.421 | 98.383 | 50.785 | 1.00 | 31.02 | N |
| ATOM | 9582 | CA | ALA | C | 382 | -2.075 | 98.710 | 49.519 | 1.00 | 33.33 | C |
| ATOM | 9583 | C | ALA | C | 382 | -2.885 | 97.505 | 48.981 | 1.00 | 34.17 | C |
| ATOM | 9584 | O | ALA | C | 382 | -4.083 | 97.627 | 48.631 | 1.00 | 33.69 | O |
| ATOM | 9585 | CB | ALA | C | 382 | -1.013 | 99.157 | 48.495 | 1.00 | 32.69 | C |
| ATOM | 9586 | N | ALA | C | 383 | -2.245 | 96.329 | 48.970 | 1.00 | 33.24 | N |
| ATOM | 9587 | CA | ALA | C | 383 | -2.883 | 95.120 | 48.454 | 1.00 | 33.99 | C |
| ATOM | 9588 | C | ALA | C | 383 | -4.138 | 94.701 | 49.220 | 1.00 | 35.87 | C |
| ATOM | 9589 | O | ALA | C | 383 | -4.868 | 93.790 | 48.803 | 1.00 | 36.37 | O |
| ATOM | 9590 | CB | ALA | C | 383 | -1.868 | 93.977 | 48.434 | 1.00 | 33.42 | C |
| ATOM | 9591 | N | GLU | C | 384 | -4.426 | 95.369 | 50.327 | 1.00 | 37.46 | N |
| ATOM | 9592 | CA | GLU | C | 384 | -5.600 | 94.981 | 51.083 | 1.00 | 39.58 | C |
| ATOM | 9593 | C | GLU | C | 384 | -6.903 | 95.204 | 50.322 | 1.00 | 39.92 | C |

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ATOM   9594  O   GLU C 384      -7.860  94.430  50.484  1.00 39.35           O
ATOM   9595  CB  GLU C 384      -5.610  95.711  52.422  1.00 41.05           C
ATOM   9596  CG  GLU C 384      -4.398  95.366  53.256  1.00 43.41           C
ATOM   9597  CD  GLU C 384      -4.398  96.085  54.586  1.00 45.51           C
ATOM   9598  OE1 GLU C 384      -5.491  96.183  55.194  1.00 46.11           O
ATOM   9599  OE2 GLU C 384      -3.312  96.534  55.021  1.00 45.17           O
ATOM   9600  N   GLU C 385      -6.934  96.238  49.483  1.00 40.95           N
ATOM   9601  CA  GLU C 385      -8.124  96.545  48.687  1.00 42.52           C
ATOM   9602  C   GLU C 385      -8.401  95.401  47.703  1.00 42.19           C
ATOM   9603  O   GLU C 385      -9.558  95.141  47.338  1.00 41.06           O
ATOM   9604  CB  GLU C 385      -7.927  97.858  47.924  1.00 45.07           C
ATOM   9605  CG  GLU C 385      -7.863  99.092  48.806  1.00 48.28           C
ATOM   9606  CD  GLU C 385      -6.637  99.939  48.516  1.00 50.72           C
ATOM   9607  OE1 GLU C 385      -6.211 100.017  47.336  1.00 51.46           O
ATOM   9608  OE2 GLU C 385      -6.098 100.536  49.472  1.00 52.88           O
ATOM   9609  N   ARG C 386      -7.327  94.717  47.302  1.00 41.10           N
ATOM   9610  CA  ARG C 386      -7.400  93.573  46.395  1.00 39.74           C
ATOM   9611  C   ARG C 386      -7.738  92.259  47.118  1.00 38.46           C
ATOM   9612  O   ARG C 386      -7.996  91.226  46.467  1.00 37.23           O
ATOM   9613  CB  ARG C 386      -6.078  93.395  45.664  1.00 40.94           C
ATOM   9614  CG  ARG C 386      -5.754  94.507  44.732  1.00 43.08           C
ATOM   9615  CD  ARG C 386      -4.630  94.092  43.847  1.00 43.42           C
ATOM   9616  NE  ARG C 386      -3.313  94.271  44.433  1.00 45.19           N
ATOM   9617  CZ  ARG C 386      -2.233  93.621  44.006  1.00 45.99           C
ATOM   9618  NH1 ARG C 386      -2.335  92.748  43.009  1.00 46.60           N
ATOM   9619  NH2 ARG C 386      -1.046  93.864  44.535  1.00 46.14           N
ATOM   9620  N   GLY C 387      -7.709  92.287  48.451  1.00 36.43           N
ATOM   9621  CA  GLY C 387      -8.050  91.100  49.215  1.00 34.48           C
ATOM   9622  C   GLY C 387      -6.945  90.467  50.043  1.00 33.21           C
ATOM   9623  O   GLY C 387      -7.183  89.475  50.749  1.00 31.82           O
ATOM   9624  N   TYR C 388      -5.748  91.029  49.941  1.00 32.62           N
ATOM   9625  CA  TYR C 388      -4.592  90.572  50.708  1.00 31.38           C
ATOM   9626  C   TYR C 388      -4.870  90.779  52.197  1.00 32.36           C
ATOM   9627  O   TYR C 388      -5.458  91.808  52.583  1.00 31.92           O
ATOM   9628  CB  TYR C 388      -3.379  91.393  50.313  1.00 31.56           C
ATOM   9629  CG  TYR C 388      -2.082  90.959  50.948  1.00 29.82           C
ATOM   9630  CD1 TYR C 388      -1.531  89.702  50.668  1.00 31.79           C
ATOM   9631  CD2 TYR C 388      -1.347  91.839  51.738  1.00 31.28           C
ATOM   9632  CE1 TYR C 388      -0.268  89.340  51.147  1.00 29.21           C
ATOM   9633  CE2 TYR C 388      -0.074  91.493  52.233  1.00 31.00           C
ATOM   9634  CZ  TYR C 388       0.457  90.235  51.922  1.00 31.80           C
ATOM   9635  OH  TYR C 388       1.725  89.906  52.356  1.00 30.27           O
ATOM   9636  N   THR C 389      -4.431  89.837  53.038  1.00 29.66           N
ATOM   9637  CA  THR C 389      -4.672  89.942  54.461  1.00 28.12           C
ATOM   9638  C   THR C 389      -3.464  89.679  55.347  1.00 28.41           C
ATOM   9639  O   THR C 389      -3.551  89.852  56.574  1.00 27.47           O
ATOM   9640  CB  THR C 389      -5.751  88.947  54.934  1.00 28.73           C
ATOM   9641  OG1 THR C 389      -5.337  87.612  54.606  1.00 30.52           O
ATOM   9642  CG2 THR C 389      -7.113  89.223  54.273  1.00 27.91           C
ATOM   9643  N   ALA C 390      -2.348  89.278  54.747  1.00 27.66           N
ATOM   9644  CA  ALA C 390      -1.154  88.925  55.522  1.00 28.09           C
ATOM   9645  C   ALA C 390      -0.394  90.050  56.228  1.00 28.56           C
ATOM   9646  O   ALA C 390       0.447  89.785  57.081  1.00 27.12           O
ATOM   9647  CB  ALA C 390      -0.181  88.111  54.636  1.00 28.52           C
ATOM   9648  N   THR C 391      -0.670  91.303  55.869  1.00 27.90           N
ATOM   9649  CA  THR C 391      -0.014  92.435  56.533  1.00 27.86           C
ATOM   9650  C   THR C 391      -0.177  92.232  58.037  1.00 26.61           C
ATOM   9651  O   THR C 391       0.745  92.493  58.820  1.00 28.61           O
ATOM   9652  CB  THR C 391      -0.702  93.782  56.153  1.00 28.98           C
ATOM   9653  OG1 THR C 391      -1.176  93.705  54.808  1.00 29.80           O
ATOM   9654  CG2 THR C 391       0.295  94.923  56.253  1.00 29.04           C
ATOM   9655  N   LYS C 392      -1.372  91.784  58.420  1.00 27.15           N
ATOM   9656  CA  LYS C 392      -1.710  91.475  59.803  1.00 26.70           C
ATOM   9657  C   LYS C 392      -1.380  89.995  59.957  1.00 25.61           C
ATOM   9658  O   LYS C 392      -2.253  89.127  59.988  1.00 25.15           O
ATOM   9659  CB  LYS C 392      -3.187  91.703  60.035  1.00 29.50           C
ATOM   9660  CG  LYS C 392      -3.581  93.176  59.869  1.00 31.78           C
ATOM   9661  CD  LYS C 392      -4.722  93.496  60.752  1.00 35.43           C
ATOM   9662  CE  LYS C 392      -5.874  92.525  60.566  1.00 37.31           C
ATOM   9663  NZ  LYS C 392      -6.622  92.273  61.864  1.00 36.96           N
ATOM   9664  N   HIS C 393      -0.096  89.734  60.062  1.00 25.65           N
ATOM   9665  CA  HIS C 393       0.392  88.365  60.159  1.00 24.53           C
ATOM   9666  C   HIS C 393      -0.030  87.488  61.331  1.00 23.78           C
ATOM   9667  O   HIS C 393      -0.034  86.246  61.196  1.00 24.50           O
ATOM   9668  CB  HIS C 393       1.906  88.395  60.065  1.00 22.87           C
ATOM   9669  CG  HIS C 393       2.555  89.303  61.057  1.00 25.04           C
ATOM   9670  ND1 HIS C 393       3.405  90.332  60.688  1.00 24.37           N
ATOM   9671  CD2 HIS C 393       2.523  89.303  62.414  1.00 24.52           C
ATOM   9672  CE1 HIS C 393       3.867  90.923  61.777  1.00 25.59           C
ATOM   9673  NE2 HIS C 393       3.347  90.319  62.839  1.00 25.49           N
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| ATOM | 9674 | N | GLN C 394 | -0.372 | 88.078 | 62.474 | 1.00 | 23.50 | N |
| ATOM | 9675 | CA | GLN C 394 | -0.736 | 87.253 | 63.628 | 1.00 | 24.73 | C |
| ATOM | 9676 | C | GLN C 394 | -2.044 | 86.523 | 63.350 | 1.00 | 25.35 | C |
| ATOM | 9677 | O | GLN C 394 | -2.140 | 85.296 | 63.503 | 1.00 | 26.30 | O |
| ATOM | 9678 | CB | GLN C 394 | -0.866 | 88.096 | 64.910 | 1.00 | 25.25 | C |
| ATOM | 9679 | CG | GLN C 394 | 0.283 | 89.027 | 65.197 | 1.00 | 24.49 | C |
| ATOM | 9680 | CD | GLN C 394 | 1.566 | 88.359 | 65.623 | 1.00 | 27.15 | C |
| ATOM | 9681 | OE1 | GLN C 394 | 1.709 | 87.135 | 65.557 | 1.00 | 26.95 | O |
| ATOM | 9682 | NE2 | GLN C 394 | 2.524 | 89.167 | 66.059 | 1.00 | 26.26 | N |
| ATOM | 9683 | N | ARG C 395 | -3.069 | 87.246 | 62.907 | 1.00 | 24.77 | N |
| ATOM | 9684 | CA | ARG C 395 | -4.343 | 86.557 | 62.659 | 1.00 | 23.79 | C |
| ATOM | 9685 | C | ARG C 395 | -4.235 | 85.630 | 61.455 | 1.00 | 21.22 | C |
| ATOM | 9686 | O | ARG C 395 | -4.973 | 84.640 | 61.364 | 1.00 | 21.98 | O |
| ATOM | 9687 | CB | ARG C 395 | -5.482 | 87.578 | 62.429 | 1.00 | 24.42 | C |
| ATOM | 9688 | CG | ARG C 395 | -5.115 | 88.719 | 61.468 | 1.00 | 25.02 | C |
| ATOM | 9689 | CD | ARG C 395 | -6.310 | 89.071 | 60.575 | 1.00 | 25.78 | C |
| ATOM | 9690 | NE | ARG C 395 | -6.812 | 87.926 | 59.787 | 1.00 | 26.64 | N |
| ATOM | 9691 | CZ | ARG C 395 | -6.168 | 87.387 | 58.748 | 1.00 | 25.05 | C |
| ATOM | 9692 | NH1 | ARG C 395 | -4.996 | 87.878 | 58.343 | 1.00 | 21.78 | N |
| ATOM | 9693 | NH2 | ARG C 395 | -6.687 | 86.335 | 58.133 | 1.00 | 24.17 | N |
| ATOM | 9694 | N | GLU C 396 | -3.337 | 85.977 | 60.535 | 1.00 | 21.04 | N |
| ATOM | 9695 | CA | GLU C 396 | -3.122 | 85.224 | 59.303 | 1.00 | 21.84 | C |
| ATOM | 9696 | C | GLU C 396 | -2.601 | 83.829 | 59.613 | 1.00 | 22.46 | C |
| ATOM | 9697 | O | GLU C 396 | -2.883 | 82.893 | 58.865 | 1.00 | 22.50 | O |
| ATOM | 9698 | CB | GLU C 396 | -2.100 | 85.917 | 58.399 | 1.00 | 24.55 | C |
| ATOM | 9699 | CG | GLU C 396 | -1.827 | 85.216 | 57.034 | 1.00 | 27.19 | C |
| ATOM | 9700 | CD | GLU C 396 | -2.860 | 85.549 | 55.952 | 1.00 | 29.25 | C |
| ATOM | 9701 | OE1 | GLU C 396 | -3.614 | 86.552 | 56.108 | 1.00 | 27.44 | O |
| ATOM | 9702 | OE2 | GLU C 396 | -2.914 | 84.817 | 54.934 | 1.00 | 28.60 | O |
| ATOM | 9703 | N | VAL C 397 | -1.834 | 83.689 | 60.694 | 1.00 | 21.45 | N |
| ATOM | 9704 | CA | VAL C 397 | -1.327 | 82.373 | 61.028 | 1.00 | 21.63 | C |
| ATOM | 9705 | C | VAL C 397 | -2.128 | 81.668 | 62.119 | 1.00 | 21.13 | C |
| ATOM | 9706 | O | VAL C 397 | -1.775 | 80.585 | 62.603 | 1.00 | 21.25 | O |
| ATOM | 9707 | CB | VAL C 397 | 0.181 | 82.445 | 61.319 | 1.00 | 24.70 | C |
| ATOM | 9708 | CG1 | VAL C 397 | 0.498 | 83.496 | 62.384 | 1.00 | 23.13 | C |
| ATOM | 9709 | CG2 | VAL C 397 | 0.649 | 81.120 | 61.724 | 1.00 | 28.92 | C |
| ATOM | 9710 | N | GLY C 398 | -3.251 | 82.268 | 62.492 | 1.00 | 21.15 | N |
| ATOM | 9711 | CA | GLY C 398 | -4.103 | 81.624 | 63.465 | 1.00 | 18.15 | C |
| ATOM | 9712 | C | GLY C 398 | -4.037 | 82.054 | 64.913 | 1.00 | 19.43 | C |
| ATOM | 9713 | O | GLY C 398 | -4.589 | 91.355 | 65.788 | 1.00 | 20.68 | O |
| ATOM | 9714 | N | ALA C 399 | -3.385 | 83.189 | 65.180 | 1.00 | 20.75 | N |
| ATOM | 9715 | CA | ALA C 399 | -3.317 | 83.718 | 66.538 | 1.00 | 21.67 | C |
| ATOM | 9716 | C | ALA C 399 | -4.751 | 83.859 | 67.082 | 1.00 | 22.28 | C |
| ATOM | 9717 | O | ALA C 399 | -5.008 | 83.499 | 68.225 | 1.00 | 22.78 | O |
| ATOM | 9718 | CB | ALA C 399 | -2.601 | 85.053 | 66.549 | 1.00 | 22.79 | C |
| ATOM | 9719 | N | GLY C 400 | -5.698 | 84.342 | 66.263 | 1.00 | 23.28 | N |
| ATOM | 9720 | CA | GLY C 400 | -7.079 | 84.445 | 66.735 | 1.00 | 22.02 | C |
| ATOM | 9721 | C | GLY C 400 | -7.771 | 83.090 | 66.856 | 1.00 | 22.70 | C |
| ATOM | 9722 | O | GLY C 400 | -8.627 | 82.867 | 67.732 | 1.00 | 22.71 | O |
| ATOM | 9723 | N | TYR C 401 | -7.394 | 82.154 | 65.986 | 1.00 | 22.26 | N |
| ATOM | 9724 | CA | TYR C 401 | -7.998 | 80.829 | 66.033 | 1.00 | 21.88 | C |
| ATOM | 9725 | C | TYR C 401 | -7.558 | 80.110 | 67.312 | 1.00 | 21.08 | C |
| ATOM | 9726 | O | TYR C 401 | -8.373 | 79.467 | 67.977 | 1.00 | 20.36 | O |
| ATOM | 9727 | CB | TYR C 401 | -7.610 | 80.018 | 64.791 | 1.00 | 20.51 | C |
| ATOM | 9728 | CG | TYR C 401 | -8.151 | 78.622 | 64.776 | 1.00 | 23.25 | C |
| ATOM | 9729 | CD1 | TYR C 401 | -9.516 | 78.373 | 64.535 | 1.00 | 20.92 | C |
| ATOM | 9730 | CD2 | TYR C 401 | -7.315 | 77.531 | 65.031 | 1.00 | 20.81 | C |
| ATOM | 9731 | CE1 | TYR C 401 | -10.012 | 77.087 | 64.552 | 1.00 | 22.53 | C |
| ATOM | 9732 | CE2 | TYR C 401 | -7.813 | 76.236 | 65.057 | 1.00 | 21.27 | C |
| ATOM | 9733 | CZ | TYR C 401 | -9.149 | 76.012 | 64.814 | 1.00 | 20.46 | C |
| ATOM | 9734 | OH | TYR C 401 | -9.625 | 74.738 | 64.821 | 1.00 | 22.98 | O |
| ATOM | 9735 | N | PHE C 402 | -6.267 | 80.206 | 67.652 | 1.00 | 21.38 | N |
| ATOM | 9736 | CA | PHE C 402 | -5.792 | 79.555 | 68.862 | 1.00 | 19.65 | C |
| ATOM | 9737 | C | PHE C 402 | -6.320 | 80.245 | 70.130 | 1.00 | 21.04 | C |
| ATOM | 9738 | O | PHE C 402 | -6.526 | 79.613 | 71.170 | 1.00 | 20.55 | O |
| ATOM | 9739 | CB | PHE C 402 | -4.247 | 79.436 | 68.824 | 1.00 | 19.48 | C |
| ATOM | 9740 | CG | PHE C 402 | -3.785 | 78.268 | 68.006 | 1.00 | 19.20 | C |
| ATOM | 9741 | CD1 | PHE C 402 | -3.641 | 78.374 | 66.630 | 1.00 | 16.94 | C |
| ATOM | 9742 | CD2 | PHE C 402 | -3.648 | 77.006 | 68.601 | 1.00 | 19.07 | C |
| ATOM | 9743 | CE1 | PHE C 402 | -3.371 | 77.229 | 65.825 | 1.00 | 19.96 | C |
| ATOM | 9744 | CE2 | PHE C 402 | -3.386 | 75.866 | 67.797 | 1.00 | 19.68 | C |
| ATOM | 9745 | CZ | PHE C 402 | -3.253 | 75.990 | 66.425 | 1.00 | 19.11 | C |
| ATOM | 9746 | N | ASP C 403 | -6.586 | 81.544 | 70.033 | 1.00 | 23.25 | N |
| ATOM | 9747 | CA | ASP C 403 | -7.177 | 82.287 | 71.157 | 1.00 | 23.96 | C |
| ATOM | 9748 | C | ASP C 403 | -8.568 | 81.703 | 71.419 | 1.00 | 24.34 | C |
| ATOM | 9749 | O | ASP C 403 | -9.019 | 81.596 | 72.576 | 1.00 | 26.93 | O |
| ATOM | 9750 | CB | ASP C 403 | -7.319 | 83.753 | 70.783 | 1.00 | 26.37 | C |
| ATOM | 9751 | CG | ASP C 403 | -6.109 | 84.565 | 71.164 | 1.00 | 28.62 | C |
| ATOM | 9752 | OD1 | ASP C 403 | -5.069 | 83.959 | 71.488 | 1.00 | 30.45 | O |
| ATOM | 9753 | OD2 | ASP C 403 | -6.183 | 85.816 | 71.145 | 1.00 | 32.06 | O |

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ATOM   9754  N    ARG C 404     -9.259  81.334  70.337  1.00 24.70          N
ATOM   9755  CA   ARG C 404    -10.589  80.760  70.461  1.00 23.84          C
ATOM   9756  C    ARG C 404    -10.523  79.422  71.162  1.00 23.44          C
ATOM   9757  O    ARG C 404    -11.370  79.088  71.997  1.00 22.81          O
ATOM   9758  CB   ARG C 404    -11.215  80.595  69.081  1.00 25.97          C
ATOM   9759  CG   ARG C 404    -12.686  80.222  69.129  1.00 30.78          C
ATOM   9760  CD   ARG C 404    -13.472  81.339  69.760  1.00 35.21          C
ATOM   9761  NE   ARG C 404    -14.906  81.067  69.796  1.00 39.46          N
ATOM   9762  CZ   ARG C 404    -15.729  81.231  68.766  1.00 39.27          C
ATOM   9763  NH1  ARG C 404    -15.282  81.662  67.600  1.00 40.12          N
ATOM   9764  NH2  ARG C 404    -17.011  80.982  68.916  1.00 41.66          N
ATOM   9765  N    ILE C 405     -9.514  78.613  70.802  1.00 21.49          N
ATOM   9766  CA   ILE C 405     -9.379  77.326  71.454  1.00 21.72          C
ATOM   9767  C    ILE C 405     -9.120  77.583  72.925  1.00 19.84          C
ATOM   9768  O    ILE C 405     -9.747  76.970  73.802  1.00 22.18          O
ATOM   9769  CB   ILE C 405     -8.172  76.475  70.886  1.00 19.37          C
ATOM   9770  CG1  ILE C 405     -8.435  76.112  69.413  1.00 20.96          C
ATOM   9771  CG2  ILE C 405     -8.007  75.193  71.725  1.00 20.17          C
ATOM   9772  CD1  ILE C 405     -7.236  75.489  68.647  1.00 21.89          C
ATOM   9773  N    ALA C 406     -8.198  78.492  73.186  1.00 20.51          N
ATOM   9774  CA   ALA C 406     -7.791  78.820  74.545  1.00 22.17          C
ATOM   9775  C    ALA C 406     -8.996  79.225  75.424  1.00 22.41          C
ATOM   9776  O    ALA C 406     -9.181  78.721  76.552  1.00 21.47          O
ATOM   9777  CB   ALA C 406     -6.744  79.930  74.494  1.00 20.26          C
ATOM   9778  N    THR C 407     -9.849  80.098  74.890  1.00 25.43          N
ATOM   9779  CA   THR C 407    -11.017  80.547  75.658  1.00 24.16          C
ATOM   9780  C    THR C 407    -12.114  79.500  75.713  1.00 24.24          C
ATOM   9781  O    THR C 407    -12.981  79.544  76.587  1.00 23.68          O
ATOM   9782  CB   THR C 407    -11.580  81.886  75.088  1.00 25.97          C
ATOM   9783  OG1  THR C 407    -11.986  81.710  73.733  1.00 27.01          O
ATOM   9784  CG2  THR C 407    -10.534  82.950  75.117  1.00 25.56          C
ATOM   9785  N    THR C 408    -12.082  78.539  74.794  1.00 22.63          N
ATOM   9786  CA   THR C 408    -13.072  77.481  74.821  1.00 24.12          C
ATOM   9787  C    THR C 408    -12.687  76.591  75.987  1.00 25.35          C
ATOM   9788  O    THR C 408    -13.563  76.119  76.746  1.00 26.29          O
ATOM   9789  CB   THR C 408    -13.079  76.654  73.508  1.00 22.92          C
ATOM   9790  OG1  THR C 408    -13.518  77.484  72.425  1.00 23.61          O
ATOM   9791  CG2  THR C 408    -14.011  75.477  73.628  1.00 22.74          C
ATOM   9792  N    VAL C 409    -11.375  76.382  76.143  1.00 24.16          N
ATOM   9793  CA   VAL C 409    -10.859  75.559  77.223  1.00 24.28          C
ATOM   9794  C    VAL C 409    -11.028  76.311  78.537  1.00 24.87          C
ATOM   9795  O    VAL C 409    -11.480  75.738  79.518  1.00 27.25          O
ATOM   9796  CB   VAL C 409     -9.358  75.223  77.003  1.00 24.33          C
ATOM   9797  CG1  VAL C 409     -8.804  74.445  78.200  1.00 25.84          C
ATOM   9798  CG2  VAL C 409     -9.214  74.395  75.724  1.00 24.32          C
ATOM   9799  N    ASP C 410    -10.679  77.593  78.542  1.00 26.73          N
ATOM   9800  CA   ASP C 410    -10.767  78.403  79.762  1.00 28.27          C
ATOM   9801  C    ASP C 410    -11.122  79.838  79.402  1.00 28.12          C
ATOM   9802  O    ASP C 410    -10.263  80.615  79.019  1.00 27.73          O
ATOM   9803  CB   ASP C 410     -9.422  78.371  80.514  1.00 28.54          C
ATOM   9804  CG   ASP C 410     -9.384  79.322  81.731  1.00 31.99          C
ATOM   9805  OD1  ASP C 410    -10.463  79.824  82.164  1.00 29.43          O
ATOM   9806  OD2  ASP C 410     -8.261  79.559  82.262  1.00 32.25          O
ATOM   9807  N    PRO C 411    -12.404  80.208  79.539  1.00 30.14          N
ATOM   9808  CA   PRO C 411    -12.858  81.566  79.214  1.00 30.70          C
ATOM   9809  C    PRO C 411    -12.096  82.666  79.950  1.00 31.36          C
ATOM   9810  O    PRO C 411    -11.971  83.776  79.443  1.00 31.77          O
ATOM   9811  CB   PRO C 411    -14.327  81.551  79.627  1.00 30.58          C
ATOM   9812  CG   PRO C 411    -14.711  80.127  79.502  1.00 32.62          C
ATOM   9813  CD   PRO C 411    -13.520  79.379  80.012  1.00 29.44          C
ATOM   9814  N    ASN C 412    -11.578  82.334  81.130  1.00 31.16          N
ATOM   9815  CA   ASN C 412    -10.880  83.284  81.979  1.00 32.41          C
ATOM   9816  C    ASN C 412     -9.363  83.341  81.837  1.00 31.51          C
ATOM   9817  O    ASN C 412     -8.682  84.037  82.614  1.00 30.57          O
ATOM   9818  CB   ASN C 412    -11.256  83.015  83.442  1.00 34.70          C
ATOM   9819  CG   ASN C 412    -12.761  83.074  83.674  1.00 36.79          C
ATOM   9820  OD1  ASN C 412    -13.447  83.926  83.105  1.00 40.63          O
ATOM   9821  ND2  ASN C 412    -13.279  82.178  84.508  1.00 37.87          N
ATOM   9822  N    SER C 413     -8.824  82.627  80.851  1.00 30.78          N
ATOM   9823  CA   SER C 413     -7.376  82.624  80.642  1.00 29.72          C
ATOM   9824  C    SER C 413     -6.792  84.022  80.547  1.00 29.39          C
ATOM   9825  O    SER C 413     -7.313  84.877  79.822  1.00 31.15          O
ATOM   9826  CB   SER C 413     -6.988  81.879  79.356  1.00 29.75          C
ATOM   9827  OG   SER C 413     -5.791  82.453  78.824  1.00 27.02          O
ATOM   9828  N    SER C 414     -5.702  84.266  81.255  1.00 28.56          N
ATOM   9829  CA   SER C 414     -5.078  85.576  81.163  1.00 29.62          C
ATOM   9830  C    SER C 414     -3.892  85.539  80.212  1.00 30.45          C
ATOM   9831  O    SER C 414     -3.071  86.456  80.195  1.00 29.83          O
ATOM   9832  CB   SER C 414     -4.631  86.069  82.547  1.00 31.25          C
ATOM   9833  OG   SER C 414     -4.024  85.041  83.288  1.00 35.26          O
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ATOM   9834  N    THR C 415      -3.797  84.472  79.410  1.00 29.98           N
ATOM   9835  CA   THR C 415      -2.662  84.369  78.499  1.00 29.94           C
ATOM   9836  C    THR C 415      -3.007  84.263  77.024  1.00 29.46           C
ATOM   9837  O    THR C 415      -2.289  83.620  76.263  1.00 28.43           O
ATOM   9838  CB   THR C 415      -1.742  83.179  78.890  1.00 29.49           C
ATOM   9839  OG1  THR C 415      -2.434  81.949  78.687  1.00 28.79           O
ATOM   9840  CG2  THR C 415      -1.336  83.273  80.370  1.00 31.12           C
ATOM   9841  N    THR C 416      -4.107  84.885  76.612  1.00 28.90           N
ATOM   9842  CA   THR C 416      -4.453  84.858  75.192  1.00 28.16           C
ATOM   9843  C    THR C 416      -3.535  85.877  74.480  1.00 27.57           C
ATOM   9844  O    THR C 416      -2.968  86.763  75.127  1.00 28.76           O
ATOM   9845  CB   THR C 416      -5.955  85.130  74.980  1.00 27.20           C
ATOM   9846  OG1  THR C 416      -6.275  86.459  75.414  1.00 29.30           O
ATOM   9847  CG2  THR C 416      -6.770  84.105  75.787  1.00 28.80           C
ATOM   9848  N    ALA C 417      -3.403  85.750  73.155  1.00 27.44           N
ATOM   9849  CA   ALA C 417      -2.463  86.542  72.360  1.00 26.69           C
ATOM   9850  C    ALA C 417      -2.815  87.847  71.647  1.00 28.32           C
ATOM   9851  O    ALA C 417      -1.995  88.770  71.635  1.00 28.09           O
ATOM   9852  CB   ALA C 417      -1.808  85.618  71.322  1.00 27.77           C
ATOM   9853  N    LEU C 418      -3.977  87.922  71.005  1.00 29.50           N
ATOM   9854  CA   LEU C 418      -4.300  89.141  70.267  1.00 29.53           C
ATOM   9855  C    LEU C 418      -4.544  90.390  71.140  1.00 29.71           C
ATOM   9856  O    LEU C 418      -4.123  91.496  70.786  1.00 31.31           O
ATOM   9857  CB   LEU C 418      -5.482  88.875  69.328  1.00 29.12           C
ATOM   9858  CG   LEU C 418      -5.038  87.986  68.147  1.00 27.75           C
ATOM   9859  CD1  LEU C 418      -6.198  87.730  67.206  1.00 29.94           C
ATOM   9860  CD2  LEU C 418      -3.917  88.665  67.407  1.00 27.93           C
ATOM   9861  N    THR C 419      -5.180  90.209  72.289  1.00 30.88           N
ATOM   9862  CA   THR C 419      -5.444  91.334  73.182  1.00 32.30           C
ATOM   9863  C    THR C 419      -4.123  91.901  73.675  1.00 32.83           C
ATOM   9864  O    THR C 419      -3.306  91.195  74.275  1.00 32.23           O
ATOM   9865  CB   THR C 419      -6.318  90.886  74.368  1.00 34.29           C
ATOM   9866  OG1  THR C 419      -7.606  90.501  73.871  1.00 35.61           O
ATOM   9867  CG2  THR C 419      -6.486  92.013  75.396  1.00 35.23           C
ATOM   9868  N    GLY C 420      -3.904  93.184  73.403  1.00 32.88           N
ATOM   9869  CA   GLY C 420      -2.670  93.822  73.819  1.00 32.83           C
ATOM   9870  C    GLY C 420      -1.533  93.664  72.826  1.00 32.16           C
ATOM   9871  O    GLY C 420      -0.390  94.042  73.102  1.00 33.66           O
ATOM   9872  N    SER C 421      -1.837  93.102  71.659  1.00 33.71           N
ATOM   9873  CA   SER C 421      -0.831  92.888  70.614  1.00 32.32           C
ATOM   9874  C    SER C 421      -0.609  94.142  69.800  1.00 32.80           C
ATOM   9875  O    SER C 421      -1.545  94.910  69.591  1.00 31.76           O
ATOM   9876  CB   SER C 421      -1.294  91.799  69.644  1.00 33.84           C
ATOM   9877  OG   SER C 421      -2.398  92.259  68.887  1.00 32.43           O
ATOM   9878  N    THR C 422       0.614  94.333  69.315  1.00 33.11           N
ATOM   9879  CA   THR C 422       0.891  95.496  68.482  1.00 33.45           C
ATOM   9880  C    THR C 422       0.078  95.440  67.173  1.00 34.52           C
ATOM   9881  O    THR C 422      -0.128  96.481  66.532  1.00 34.52           O
ATOM   9882  CB   THR C 422       2.398  95.650  68.149  1.00 32.75           C
ATOM   9883  OG1  THR C 422       2.838  94.579  67.297  1.00 35.41           O
ATOM   9884  CG2  THR C 422       3.223  95.677  69.431  1.00 34.43           C
ATOM   9885  N    GLU C 423      -0.372  94.241  66.772  1.00 33.78           N
ATOM   9886  CA   GLU C 423      -1.185  94.089  65.559  1.00 33.79           C
ATOM   9887  C    GLU C 423      -2.544  94.771  65.786  1.00 35.37           C
ATOM   9888  O    GLU C 423      -3.044  95.513  64.934  1.00 36.32           O
ATOM   9889  CB   GLU C 423      -1.420  92.597  65.250  1.00 30.85           C
ATOM   9890  CG   GLU C 423      -2.615  92.291  64.318  1.00 29.04           C
ATOM   9891  CD   GLU C 423      -2.446  90.951  63.563  1.00 28.33           C
ATOM   9892  OE1  GLU C 423      -1.392  90.762  62.935  1.00 25.80           O
ATOM   9893  OE2  GLU C 423      -3.363  90.104  63.589  1.00 26.47           O
ATOM   9894  N    GLU C 424      -3.143  94.476  66.936  1.00 36.13           N
ATOM   9895  CA   GLU C 424      -4.440  95.016  67.326  1.00 36.65           C
ATOM   9896  C    GLU C 424      -4.387  96.534  67.508  1.00 36.57           C
ATOM   9897  O    GLU C 424      -5.313  97.260  67.105  1.00 36.76           O
ATOM   9898  CB   GLU C 424      -4.868  94.338  68.623  1.00 38.76           C
ATOM   9899  CG   GLU C 424      -5.725  95.169  69.541  1.00 42.79           C
ATOM   9900  CD   GLU C 424      -5.809  94.565  70.930  1.00 45.17           C
ATOM   9901  OE1  GLU C 424      -6.527  93.552  71.111  1.00 46.85           O
ATOM   9902  OE2  GLU C 424      -5.138  95.103  71.840  1.00 45.45           O
ATOM   9903  N    GLY C 425      -3.289  97.011  68.078  1.00 35.50           N
ATOM   9904  CA   GLY C 425      -3.153  98.436  68.335  1.00 36.88           C
ATOM   9905  C    GLY C 425      -2.497  99.276  67.261  1.00 37.55           C
ATOM   9906  O    GLY C 425      -2.456 100.504  67.386  1.00 37.52           O
ATOM   9907  N    GLN C 426      -2.007  98.647  66.196  1.00 37.75           N
ATOM   9908  CA   GLN C 426      -1.322  99.397  65.144  1.00 38.37           C
ATOM   9909  C    GLN C 426      -1.643  99.030  63.696  1.00 39.55           C
ATOM   9910  O    GLN C 426      -0.873  99.412  62.802  1.00 40.06           O
ATOM   9911  CB   GLN C 426       0.186  99.281  65.321  1.00 36.76           C
ATOM   9912  CG   GLN C 426       0.707  99.585  66.701  1.00 36.42           C
ATOM   9913  CD   GLN C 426       2.215  99.505  66.740  1.00 36.49           C
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| ATOM | 9914 | OE1 | GLN C | 426 | 2.872 | 99.653 | 65.702 | 1.00 | 36.77 | O |
|------|------|-----|-------|-----|-------|--------|--------|------|-------|---|
| ATOM | 9915 | NE2 | GLN C | 426 | 2.784 | 99.288 | 67.934 | 1.00 | 36.79 | N |
| ATOM | 9916 | N | PHE C | 427 | -2.751 | 98.307 | 63.461 | 1.00 | 41.29 | N |
| ATOM | 9917 | CA | PHE C | 427 | -3.154 | 97.894 | 62.101 | 1.00 | 41.50 | C |
| ATOM | 9918 | C | PHE C | 427 | -4.667 | 98.001 | 61.805 | 1.00 | 42.06 | C |
| ATOM | 9919 | O | PHE C | 427 | -4.994 | 98.273 | 60.624 | 1.00 | 43.75 | O |
| ATOM | 9920 | CB | PHE C | 427 | -2.662 | 96.451 | 61.798 | 1.00 | 39.99 | C |
| ATOM | 9921 | CG | PHE C | 427 | -1.174 | 96.323 | 61.743 | 1.00 | 38.27 | C |
| ATOM | 9922 | CD1 | PHE C | 427 | -0.410 | 96.442 | 62.901 | 1.00 | 37.38 | C |
| ATOM | 9923 | CD2 | PHE C | 427 | -0.522 | 96.140 | 60.525 | 1.00 | 37.14 | C |
| ATOM | 9924 | CE1 | PHE C | 427 | 0.988 | 96.389 | 62.857 | 1.00 | 36.97 | C |
| ATOM | 9925 | CE2 | PHE C | 427 | 0.875 | 96.082 | 60.463 | 1.00 | 36.34 | C |
| ATOM | 9926 | CZ | PHE C | 427 | 1.633 | 96.210 | 61.634 | 1.00 | 37.17 | C |
| TER | 9927 | | PHE C | 427 | | | | | | |
| ATOM | 9928 | N | ALA D | 1 | 39.840 | 50.930 | 69.135 | 1.00 | 51.00 | N |
| ATOM | 9929 | CA | ALA D | 1 | 39.794 | 52.410 | 69.376 | 1.00 | 51.12 | C |
| ATOM | 9930 | C | ALA D | 1 | 40.699 | 53.170 | 68.403 | 1.00 | 50.80 | C |
| ATOM | 9931 | O | ALA D | 1 | 41.489 | 52.570 | 67.666 | 1.00 | 50.59 | O |
| ATOM | 9932 | CB | ALA D | 1 | 40.187 | 52.734 | 70.838 | 1.00 | 51.32 | C |
| ATOM | 9933 | N | SER D | 2 | 40.582 | 54.495 | 68.427 | 1.00 | 49.70 | N |
| ATOM | 9934 | CA | SER D | 2 | 41.331 | 55.387 | 67.537 | 1.00 | 48.53 | C |
| ATOM | 9935 | C | SER D | 2 | 41.483 | 56.693 | 68.319 | 1.00 | 47.12 | C |
| ATOM | 9936 | O | SER D | 2 | 40.898 | 56.828 | 69.405 | 1.00 | 48.29 | O |
| ATOM | 9937 | CB | SER D | 2 | 40.488 | 55.611 | 66.261 | 1.00 | 48.69 | C |
| ATOM | 9938 | OG | SER D | 2 | 41.071 | 56.521 | 65.340 | 1.00 | 49.90 | O |
| ATOM | 9939 | N | VAL D | 3 | 42.258 | 57.649 | 67.808 | 1.00 | 44.77 | N |
| ATOM | 9940 | CA | VAL D | 3 | 42.373 | 58.911 | 68.529 | 1.00 | 41.61 | C |
| ATOM | 9941 | C | VAL D | 3 | 41.518 | 60.004 | 67.887 | 1.00 | 39.28 | C |
| ATOM | 9942 | O | VAL D | 3 | 41.385 | 61.066 | 68.454 | 1.00 | 38.82 | O |
| ATOM | 9943 | CB | VAL D | 3 | 43.841 | 59.426 | 68.644 | 1.00 | 42.10 | C |
| ATOM | 9944 | CG1 | VAL D | 3 | 44.755 | 58.292 | 69.074 | 1.00 | 41.23 | C |
| ATOM | 9945 | CG2 | VAL D | 3 | 44.290 | 60.055 | 67.338 | 1.00 | 42.12 | C |
| ATOM | 9946 | N | VAL D | 4 | 40.919 | 59.747 | 66.723 | 1.00 | 37.14 | N |
| ATOM | 9947 | CA | VAL D | 4 | 40.087 | 60.783 | 66.085 | 1.00 | 34.30 | C |
| ATOM | 9948 | C | VAL D | 4 | 38.992 | 61.190 | 67.082 | 1.00 | 32.33 | C |
| ATOM | 9949 | O | VAL D | 4 | 38.410 | 60.332 | 67.753 | 1.00 | 30.94 | O |
| ATOM | 9950 | CB | VAL D | 4 | 39.420 | 60.262 | 64.778 | 1.00 | 33.25 | C |
| ATOM | 9951 | CG1 | VAL D | 4 | 38.615 | 61.363 | 64.129 | 1.00 | 33.16 | C |
| ATOM | 9952 | CG2 | VAL D | 4 | 40.474 | 59.759 | 63.815 | 1.00 | 33.56 | C |
| ATOM | 9953 | N | GLY D | 5 | 38.751 | 62.491 | 67.207 | 1.00 | 30.96 | N |
| ATOM | 9954 | CA | GLY D | 5 | 37.743 | 62.966 | 68.140 | 1.00 | 31.66 | C |
| ATOM | 9955 | C | GLY D | 5 | 38.034 | 62.875 | 69.638 | 1.00 | 31.66 | C |
| ATOM | 9956 | O | GLY D | 5 | 37.114 | 62.970 | 70.461 | 1.00 | 30.23 | O |
| ATOM | 9957 | N | THR D | 6 | 39.295 | 62.678 | 70.025 | 1.00 | 32.52 | N |
| ATOM | 9958 | CA | THR D | 6 | 39.603 | 62.613 | 71.453 | 1.00 | 31.79 | C |
| ATOM | 9959 | C | THR D | 6 | 39.326 | 63.988 | 72.055 | 1.00 | 30.30 | C |
| ATOM | 9960 | O | THR D | 6 | 39.631 | 65.020 | 71.462 | 1.00 | 29.90 | O |
| ATOM | 9961 | CB | THR D | 6 | 41.078 | 62.205 | 71.705 | 1.00 | 34.15 | C |
| ATOM | 9962 | OG1 | THR D | 6 | 41.265 | 60.823 | 71.338 | 1.00 | 37.40 | O |
| ATOM | 9963 | CG2 | THR D | 6 | 41.419 | 62.363 | 73.170 | 1.00 | 34.86 | C |
| ATOM | 9964 | N | PRO D | 7 | 38.723 | 64.027 | 73.242 | 1.00 | 29.67 | N |
| ATOM | 9965 | CA | PRO D | 7 | 38.428 | 65.330 | 73.849 | 1.00 | 29.91 | C |
| ATOM | 9966 | C | PRO D | 7 | 39.690 | 66.070 | 74.306 | 1.00 | 31.29 | C |
| ATOM | 9967 | O | PRO D | 7 | 40.729 | 65.442 | 74.552 | 1.00 | 31.86 | O |
| ATOM | 9968 | CB | PRO D | 7 | 37.560 | 64.972 | 75.051 | 1.00 | 28.71 | C |
| ATOM | 9969 | CG | PRO D | 7 | 37.064 | 63.589 | 74.780 | 1.00 | 28.28 | C |
| ATOM | 9970 | CD | PRO D | 7 | 38.211 | 62.923 | 74.063 | 1.00 | 28.93 | C |
| ATOM | 9971 | N | LYS D | 8 | 39.594 | 67.391 | 74.407 | 1.00 | 31.57 | N |
| ATOM | 9972 | CA | LYS D | 8 | 40.709 | 68.202 | 74.917 | 1.00 | 32.49 | C |
| ATOM | 9973 | C | LYS D | 8 | 40.721 | 67.918 | 76.411 | 1.00 | 32.36 | C |
| ATOM | 9974 | O | LYS D | 8 | 39.699 | 67.563 | 76.977 | 1.00 | 32.25 | O |
| ATOM | 9975 | CB | LYS D | 8 | 40.457 | 69.706 | 74.736 | 1.00 | 32.21 | C |
| ATOM | 9976 | CG | LYS D | 8 | 40.522 | 70.199 | 73.330 | 1.00 | 33.27 | C |
| ATOM | 9977 | CD | LYS D | 8 | 40.099 | 71.649 | 73.233 | 1.00 | 34.76 | C |
| ATOM | 9978 | CE | LYS D | 8 | 40.020 | 72.058 | 71.782 | 1.00 | 36.26 | C |
| ATOM | 9979 | NZ | LYS D | 8 | 39.657 | 73.490 | 71.567 | 1.00 | 38.05 | N |
| ATOM | 9980 | N | SER D | 9 | 41.878 | 68.065 | 77.051 | 1.00 | 33.29 | N |
| ATOM | 9981 | CA | SER D | 9 | 41.969 | 67.868 | 78.503 | 1.00 | 31.98 | C |
| ATOM | 9982 | C | SER D | 9 | 41.345 | 69.122 | 79.153 | 1.00 | 31.75 | C |
| ATOM | 9983 | O | SER D | 9 | 41.176 | 70.164 | 78.508 | 1.00 | 30.37 | O |
| ATOM | 9984 | CB | SER D | 9 | 43.437 | 67.774 | 78.939 | 1.00 | 33.40 | C |
| ATOM | 9985 | OG | SER D | 9 | 44.046 | 69.050 | 78.813 | 1.00 | 33.04 | O |
| ATOM | 9986 | N | ALA D | 10 | 41.017 | 69.016 | 80.431 | 1.00 | 32.79 | N |
| ATOM | 9987 | CA | ALA D | 10 | 40.422 | 70.112 | 81.182 | 1.00 | 32.48 | C |
| ATOM | 9988 | C | ALA D | 10 | 41.364 | 71.312 | 81.230 | 1.00 | 33.35 | C |
| ATOM | 9989 | O | ALA D | 10 | 40.935 | 72.460 | 81.191 | 1.00 | 32.55 | O |
| ATOM | 9990 | CB | ALA D | 10 | 40.109 | 69.629 | 82.575 | 1.00 | 32.07 | C |
| ATOM | 9991 | N | GLU D | 11 | 42.659 | 71.032 | 81.313 | 1.00 | 34.76 | N |
| ATOM | 9992 | CA | GLU D | 11 | 43.681 | 72.080 | 81.362 | 1.00 | 35.99 | C |
| ATOM | 9993 | C | GLU D | 11 | 43.652 | 72.904 | 80.079 | 1.00 | 35.05 | C |

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ATOM   9994  O   GLU D  11      43.724  74.139  80.112  1.00 35.16           O
ATOM   9995  CB  GLU D  11      45.072  71.449  81.512  1.00 38.81           C
ATOM   9996  CG  GLU D  11      45.317  70.590  82.764  1.00 41.73           C
ATOM   9997  CD  GLU D  11      44.202  69.577  83.077  1.00 44.77           C
ATOM   9998  OE1 GLU D  11      43.745  68.840  82.157  1.00 44.86           O
ATOM   9999  OE2 GLU D  11      43.798  69.512  84.267  1.00 45.64           O
ATOM  10000  N   GLN D  12      43.563  72.226  78.939  1.00 35.21           N
ATOM  10001  CA  GLN D  12      43.539  72.935  77.664  1.00 34.81           C
ATOM  10002  C   GLN D  12      42.354  73.892  77.629  1.00 33.56           C
ATOM  10003  O   GLN D  12      42.491  75.035  77.205  1.00 32.06           O
ATOM  10004  CB  GLN D  12      43.420  71.972  76.463  1.00 37.96           C
ATOM  10005  CG  GLN D  12      44.403  70.804  76.382  1.00 41.15           C
ATOM  10006  CD  GLN D  12      44.263  70.039  75.060  1.00 44.14           C
ATOM  10007  OE1 GLN D  12      44.307  68.799  75.018  1.00 44.75           O
ATOM  10008  NE2 GLN D  12      44.094  70.786  73.966  1.00 45.43           N
ATOM  10009  N   ILE D  13      41.184  73.408  78.069  1.00 32.54           N
ATOM  10010  CA  ILE D  13      39.974  74.225  78.066  1.00 32.06           C
ATOM  10011  C   ILE D  13      40.162  75.432  78.962  1.00 31.61           C
ATOM  10012  O   ILE D  13      39.920  76.569  78.557  1.00 32.16           O
ATOM  10013  CB  ILE D  13      38.725  73.431  78.579  1.00 30.95           C
ATOM  10014  CG1 ILE D  13      38.453  72.230  77.679  1.00 31.11           C
ATOM  10015  CG2 ILE D  13      37.480  74.344  78.570  1.00 28.90           C
ATOM  10016  CD1 ILE D  13      37.269  71.379  78.129  1.00 30.19           C
ATOM  10017  N   GLN D  14      40.593  75.165  80.188  1.00 33.79           N
ATOM  10018  CA  GLN D  14      40.807  76.215  81.175  1.00 34.87           C
ATOM  10019  C   GLN D  14      41.719  77.279  80.593  1.00 35.73           C
ATOM  10020  O   GLN D  14      41.538  78.476  80.825  1.00 33.57           O
ATOM  10021  CB  GLN D  14      41.438  75.611  82.428  1.00 35.52           C
ATOM  10022  CG  GLN D  14      41.485  76.571  83.584  1.00 36.45           C
ATOM  10023  CD  GLN D  14      40.111  77.046  83.935  1.00 36.62           C
ATOM  10024  OE1 GLN D  14      39.255  76.248  84.319  1.00 37.44           O
ATOM  10025  NE2 GLN D  14      39.869  78.344  83.788  1.00 36.77           N
ATOM  10026  N   GLN D  15      42.706  76.838  79.821  1.00 37.14           N
ATOM  10027  CA  GLN D  15      43.634  77.783  79.224  1.00 39.22           C
ATOM  10028  C   GLN D  15      42.959  78.713  78.233  1.00 39.99           C
ATOM  10029  O   GLN D  15      43.178  79.930  78.261  1.00 40.65           O
ATOM  10030  CB  GLN D  15      44.786  77.051  78.552  1.00 41.37           C
ATOM  10031  CG  GLN D  15      45.688  77.980  77.750  1.00 45.23           C
ATOM  10032  CD  GLN D  15    , 47.104  77.451  77.628  1.00 47.41           C
ATOM  10033  OE1 GLN D  15      47.316  76.241  77.481  1.00 49.31           O
ATOM  10034  NE2 GLN D  15      48.085  78.353  77.682  1.00 48.46           N
ATOM  10035  N   GLU D  16      42.127  78.149  77.362  1.00 39.15           N
ATOM  10036  CA  GLU D  16      41.441  78.961  76.377  1.00 39.04           C
ATOM  10037  C   GLU D  16      40.545  79.946  77.084  1.00 37.84           C
ATOM  10038  O   GLU D  16      40.457  81.107  76.695  1.00 38.24           O
ATOM  10039  CB  GLU D  16      40.588  78.092  75.464  1.00 41.16           C
ATOM  10040  CG  GLU D  16      41.350  77.080  74.651  1.00 43.40           C
ATOM  10041  CD  GLU D  16      40.420  76.337  73.698  1.00 45.83           C
ATOM  10042  OE1 GLU D  16      39.680  77.024  72.954  1.00 46.49           O
ATOM  10043  OE2 GLU D  16      40.426  75.081  73.696  1.00 45.86           O
ATOM  10044  N   TRP D  17      39.853  79.474  78.115  1.00 37.48           N
ATOM  10045  CA  TRP D  17      38.962  80.351  78.860  1.00 36.55           C
ATOM  10046  C   TRP D  17      39.807  81.459  79.492  1.00 37.33           C
ATOM  10047  O   TRP D  17      39.385  82.607  79.541  1.00 36.17           O
ATOM  10048  CB  TRP D  17      38.207  79.587  79.974  1.00 35.97           C
ATOM  10049  CG  TRP D  17      37.101  78.644  79.485  1.00 35.18           C
ATOM  10050  CD1 TRP D  17      36.692  78.457  78.190  1.00 34.08           C
ATOM  10051  CD2 TRP D  17      36.319  77.731  80.288  1.00 34.15           C
ATOM  10052  NE1 TRP D  17      35.714  77.487  78.139  1.00 33.80           N
ATOM  10053  CE2 TRP D  17      35.469  77.023  79.406  1.00 33.75           C
ATOM  10054  CE3 TRP D  17      36.260  77.445  81.660  1.00 33.26           C
ATOM  10055  CZ2 TRP D  17      34.573  76.040  79.850  1.00 34.46           C
ATOM  10056  CZ3 TRP D  17      35.363  76.463  82.109  1.00 34.86           C
ATOM  10057  CH2 TRP D  17      34.532  75.772  81.199  1.00 32.52           C
ATOM  10058  N   ASP D  18      41.004  81.105  79.955  1.00 37.59           N
ATOM  10059  CA  ASP D  18      41.880  82.090  80.592  1.00 39.99           C
ATOM  10060  C   ASP D  18      42.572  83.084  79.672  1.00 40.28           C
ATOM  10061  O   ASP D  18      42.749  84.249  80.036  1.00 40.96           O
ATOM  10062  CB  ASP D  18      42.946  81.384  81.431  1.00 39.83           C
ATOM  10063  CG  ASP D  18      42.368  80.723  82.662  1.00 40.63           C
ATOM  10064  OD1 ASP D  18      41.347  81.224  83.194  1.00 41.71           O
ATOM  10065  OD2 ASP D  18      42.941  79.712  83.110  1.00 41.66           O
ATOM  10066  N   THR D  19      42.945  82.639  78.478  1.00 40.74           N
ATOM  10067  CA  THR D  19      43.662  83.505  77.553  1.00 40.08           C
ATOM  10068  C   THR D  19      42.925· 84.063  76.351  1.00 40.21           C
ATOM  10069  O   THR D  19      43.212  85.184  75.930  1.00 40.44           O
ATOM  10070  CB  THR D  19      44.939  82.802  77.020  1.00 40.94           C
ATOM  10071  OG1 THR D  19      44.579  81.607  76.319  1.00 40.27           O
ATOM  10072  CG2 THR D  19      45.854  82.428  78.163  1.00 40.53           C
ATOM  10073  N   ASN D  20      41.991  83.311  75.772  1.00 39.54           N
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| ATOM | 10074 | CA | ASN D | 20 | 41.312 | 83.827 | 74.596 | 1.00 | 38.19 | C |
|------|-------|-----|--------|-----|--------|--------|--------|------|-------|---|
| ATOM | 10075 | C | ASN D | 20 | 40.389 | 84.969 | 74.947 | 1.00 | 37.53 | C |
| ATOM | 10076 | O | ASN D | 20 | 39.551 | 84.843 | 75.841 | 1.00 | 38.16 | O |
| ATOM | 10077 | CB | ASN D | 20 | 40.529 | 82.734 | 73.888 | 1.00 | 39.56 | C |
| ATOM | 10078 | CG | ASN D | 20 | 40.130 | 83.146 | 72.500 | 1.00 | 39.06 | C |
| ATOM | 10079 | OD1 | ASN D | 20 | 39.500 | 84.187 | 72.304 | 1.00 | 39.89 | O |
| ATOM | 10080 | ND2 | ASN D | 20 | 40.504 | 82.341 | 71.522 | 1.00 | 41.27 | N |
| ATOM | 10081 | N | PRO D | 21 | 40.524 | 86.102 | 74.235 | 1.00 | 35.76 | N |
| ATOM | 10082 | CA | PRO D | 21 | 39.740 | 87.321 | 74.422 | 1.00 | 35.14 | C |
| ATOM | 10083 | C | PRO D | 21 | 38.262 | 87.091 | 74.154 | 1.00 | 34.71 | C |
| ATOM | 10084 | O | PRO D | 21 | 37.423 | 87.958 | 74.462 | 1.00 | 32.75 | O |
| ATOM | 10085 | CB | PRO D | 21 | 40.340 | 88.292 | 73.399 | 1.00 | 35.91 | C |
| ATOM | 10086 | CG | PRO D | 21 | 41.645 | 87.687 | 73.045 | 1.00 | 36.12 | C |
| ATOM | 10087 | CD | PRO D | 21 | 41.362 | 86.230 | 73.038 | 1.00 | 36.44 | C |
| ATOM | 10088 | N | ARG D | 22 | 37.962 | 85.943 | 73.539 | 1.00 | 33.31 | N |
| ATOM | 10089 | CA | ARG D | 22 | 36.575 | 85.563 | 73.219 | 1.00 | 32.84 | C |
| ATOM | 10090 | C | ARG D | 22 | 35.769 | 85.368 | 74.506 | 1.00 | 33.09 | C |
| ATOM | 10091 | O | ARG D | 22 | 34.586 | 85.711 | 74.572 | 1.00 | 33.78 | O |
| ATOM | 10092 | CB | ARG D | 22 | 36.541 | 84.251 | 72.416 | 1.00 | 32.36 | C |
| ATOM | 10093 | CG | ARG D | 22 | 35.141 | 83.687 | 72.208 | 1.00 | 29.30 | C |
| ATOM | 10094 | CD | ARG D | 22 | 34.247 | 84.681 | 71.503 | 1.00 | 30.05 | C |
| ATOM | 10095 | NE | ARG D | 22 | 32.923 | 84.120 | 71.246 | 1.00 | 29.97 | N |
| ATOM | 10096 | CZ | ARG D | 22 | 31.912 | 84.108 | 72.113 | 1.00 | 29.53 | C |
| ATOM | 10097 | NH1 | ARG D | 22 | 32.046 | 84.635 | 73.315 | 1.00 | 27.87 | N |
| ATOM | 10098 | NH2 | ARG D | 22 | 30.745 | 83.578 | 71.763 | 1.00 | 28.43 | N |
| ATOM | 10099 | N | TRP D | 23 | 36.432 | 84.809 | 75.513 | 1.00 | 34.03 | N |
| ATOM | 10100 | CA | TRP D | 23 | 35.853 | 84.531 | 76.823 | 1.00 | 34.17 | C |
| ATOM | 10101 | C | TRP D | 23 | 36.056 | 85.680 | 77.825 | 1.00 | 35.80 | C |
| ATOM | 10102 | O | TRP D | 23 | 35.710 | 85.571 | 79.005 | 1.00 | 34.43 | O |
| ATOM | 10103 | CB | TRP D | 23 | 36.484 | 83.241 | 77.342 | 1.00 | 32.44 | C |
| ATOM | 10104 | CG | TRP D | 23 | 36.315 | 82.138 | 76.342 | 1.00 | 31.25 | C |
| ATOM | 10105 | CD1 | TRP D | 23 | 37.272 | 81.293 | 75.881 | 1.00 | 29.18 | C |
| ATOM | 10106 | CD2 | TRP D | 23 | 35.100 | 81.796 | 75.650 | 1.00 | 29.78 | C |
| ATOM | 10107 | NE1 | TRP D | 23 | 36.736 | 80.442 | 74.938 | 1.00 | 30.81 | N |
| ATOM | 10108 | CE2 | TRP D | 23 | 35.404 | 80.731 | 74.778 | 1.00 | 29.64 | C |
| ATOM | 10109 | CE3 | TRP D | 23 | 33.786 | 82.291 | 75.689 | 1.00 | 28.33 | C |
| ATOM | 10110 | CZ2 | TRP D | 23 | 34.440 | 80.143 | 73.939 | 1.00 | 28.98 | C |
| ATOM | 10111 | CZ3 | TRP D | 23 | 32.823 | 81.706 | 74.858 | 1.00 | 30.36 | C |
| ATOM | 10112 | CH2 | TRP D | 23 | 33.164 | 80.639 | 73.991 | 1.00 | 28.45 | C |
| ATOM | 10113 | N | LYS D | 24 | 36.598 | 86.786 | 77.322 | 1.00 | 37.83 | N |
| ATOM | 10114 | CA | LYS D | 24 | 36.882 | 87.966 | 78.116 | 1.00 | 39.07 | C |
| ATOM | 10115 | C | LYS D | 24 | 35.844 | 88.268 | 79.170 | 1.00 | 39.04 | C |
| ATOM | 10116 | O | LYS D | 24 | 36.147 | 88.236 | 80.365 | 1.00 | 39.91 | O |
| ATOM | 10117 | CB | LYS D | 24 | 37.034 | 89.186 | 77.189 | 1.00 | 41.33 | C |
| ATOM | 10118 | CG | LYS D | 24 | 37.634 | 90.418 | 77.851 | 1.00 | 42.74 | C |
| ATOM | 10119 | CD | LYS D | 24 | 36.582 | 91.467 | 78.208 | 1.00 | 45.11 | C |
| ATOM | 10120 | CE | LYS D | 24 | 36.666 | 92.712 | 77.313 | 1.00 | 43.71 | C |
| ATOM | 10121 | NZ | LYS D | 24 | 36.605 | 92.356 | 75.872 | 1.00 | 44.70 | N |
| ATOM | 10122 | N | ASP D | 25 | 34.623 | 88.568 | 78.727 | 1.00 | 39.46 | N |
| ATOM | 10123 | CA | ASP D | 25 | 33.530 | 88.931 | 79.630 | 1.00 | 38.67 | C |
| ATOM | 10124 | C | ASP D | 25 | 32.548 | 87.796 | 79.928 | 1.00 | 36.85 | C |
| ATOM | 10125 | O | ASP D | 25 | 31.415 | 88.056 | 80.332 | 1.00 | 36.91 | O |
| ATOM | 10126 | CB | ASP D | 25 | 32.723 | 90.085 | 79.019 | 1.00 | 42.02 | C |
| ATOM | 10127 | CG | ASP D | 25 | 33.567 | 91.304 | 78.717 | 1.00 | 43.92 | C |
| ATOM | 10128 | OD1 | ASP D | 25 | 34.202 | 91.824 | 79.661 | 1.00 | 47.07 | O |
| ATOM | 10129 | OD2 | ASP D | 25 | 33.585 | 91.742 | 77.544 | 1.00 | 44.83 | O |
| ATOM | 10130 | N | VAL D | 26 | 32.984 | 86.557 | 79.758 | 1.00 | 34.54 | N |
| ATOM | 10131 | CA | VAL D | 26 | 32.099 | 85.403 | 79.934 | 1.00 | 31.81 | C |
| ATOM | 10132 | C | VAL D | 26 | 32.224 | 84.659 | 81.258 | 1.00 | 30.30 | C |
| ATOM | 10133 | O | VAL D | 26 | 33.261 | 84.068 | 81.546 | 1.00 | 29.39 | O |
| ATOM | 10134 | CB | VAL D | 26 | 32.336 | 84.364 | 78.787 | 1.00 | 29.40 | C |
| ATOM | 10135 | CG1 | VAL D | 26 | 31.382 | 83.140 | 78.948 | 1.00 | 29.21 | C |
| ATOM | 10136 | CG2 | VAL D | 26 | 32.137 | 85.021 | 77.451 | 1.00 | 26.97 | C |
| ATOM | 10137 | N | THR D | 27 | 31.152 | 84.672 | 82.042 | 1.00 | 29.83 | N |
| ATOM | 10138 | CA | THR D | 27 | 31.119 | 83.943 | 83.303 | 1.00 | 29.07 | C |
| ATOM | 10139 | C | THR D | 27 | 30.602 | 82.503 | 83.146 | 1.00 | 27.92 | C |
| ATOM | 10140 | O | THR D | 27 | 29.591 | 82.266 | 82.480 | 1.00 | 27.65 | O |
| ATOM | 10141 | CB | THR D | 27 | 30.220 | 84.654 | 84.315 | 1.00 | 29.64 | C |
| ATOM | 10142 | OG1 | THR D | 27 | 30.816 | 85.907 | 84.656 | 1.00 | 30.82 | O |
| ATOM | 10143 | CG2 | THR D | 27 | 30.057 | 83.817 | 85.568 | 1.00 | 29.25 | C |
| ATOM | 10144 | N | ARG D | 28 | 31.301 | 81.551 | 83.752 | 1.00 | 26.86 | N |
| ATOM | 10145 | CA | ARG D | 28 | 30.873 | 80.153 | 83.716 | 1.00 | 27.41 | C |
| ATOM | 10146 | C | ARG D | 28 | 30.804 | 79.698 | 85.163 | 1.00 | 28.55 | C |
| ATOM | 10147 | O | ARG D | 28 | 31.818 | 79.704 | 85.864 | 1.00 | 27.80 | O |
| ATOM | 10148 | CB | ARG D | 28 | 31.865 | 79.295 | 82.932 | 1.00 | 26.44 | C |
| ATOM | 10149 | CG | ARG D | 28 | 31.806 | 79.510 | 81.427 | 1.00 | 28.01 | C |
| ATOM | 10150 | CD | ARG D | 28 | 32.890 | 78.681 | 80.759 | 1.00 | 29.02 | C |
| ATOM | 10151 | NE | ARG D | 28 | 32.777 | 78.531 | 79.302 | 1.00 | 30.69 | N |
| ATOM | 10152 | CZ | ARG D | 28 | 33.222 | 79.407 | 78.393 | 1.00 | 31.63 | C |
| ATOM | 10153 | NH1 | ARG D | 28 | 33.809 | 80.541 | 78.780 | 1.00 | 30.88 | N |

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ATOM  10154  NH2  ARG D  28      33.154  79.110  77.084  1.00 29.12      N
ATOM  10155  N    THR D  29      29.618  79.314  85.623  1.00 26.92      N
ATOM  10156  CA   THR D  29      29.483  78.897  86.999  1.00 27.31      C
ATOM  10157  C    THR D  29      29.855  77.437  87.203  1.00 27.90      C
ATOM  10158  O    THR D  29      29.817  76.921  88.318  1.00 29.32      O
ATOM  10159  CB   THR D  29      28.066  79.204  87.541  1.00 27.84      C
ATOM  10160  OG1  THR D  29      27.077  78.612  86.695  1.00 25.07      O
ATOM  10161  CG2  THR D  29      27.824  80.718  87.575  1.00 24.91      C
ATOM  10162  N    TYR D  30      30.236  76.772  86.125  1.00 26.40      N
ATOM  10163  CA   TYR D  30      30.674  75.387  86.214  1.00 25.62      C
ATOM  10164  C    TYR D  30      32.156  75.387  85.833  1.00 25.22      C
ATOM  10165  O    TYR D  30      32.660  76.389  85.328  1.00 25.17      O
ATOM  10166  CB   TYR D  30      29.854  74.494  85.258  1.00 24.28      C
ATOM  10167  CG   TYR D  30      29.706  75.057  83.848  1.00 24.44      C
ATOM  10168  CD1  TYR D  30      30.738  74.955  82.917  1.00 22.99      C
ATOM  10169  CD2  TYR D  30      28.530  75.706  83.459  1.00 23.59      C
ATOM  10170  CE1  TYR D  30      30.607  75.486  81.637  1.00 21.95      C
ATOM  10171  CE2  TYR D  30      28.390  76.231  82.197  1.00 23.47      C
ATOM  10172  CZ   TYR D  30      29.439  76.115  81.290  1.00 22.40      C
ATOM  10173  OH   TYR D  30      29.278  76.646  80.058  1.00 22.04      O
ATOM  10174  N    SER D  31      32.837  74.269  86.038  1.00 26.35      N
ATOM  10175  CA   SER D  31      34.267  74.183  85.749  1.00 27.85      C
ATOM  10176  C    SER D  31      34.618  73.494  84.437  1.00 28.67      C
ATOM  10177  O    SER D  31      33.783  72.812  83.820  1.00 27.08      O
ATOM  10178  CB   SER D  31      34.953  73.404  86.845  1.00 28.23      C
ATOM  10179  OG   SER D  31      34.610  72.027  86.722  1.00 30.86      O
ATOM  10180  N    ALA D  32      35.874  73.646  84.032  1.00 27.49      N
ATOM  10181  CA   ALA D  32      36.335  73.000  82.818  1.00 28.66      C
ATOM  10182  C    ALA D  32      36.245  71.491  83.015  1.00 29.79      C
ATOM  10183  O    ALA D  32      35.877  70.750  82.094  1.00 30.08      O
ATOM  10184  CB   ALA D  32      37.789  73.425  82.492  1.00 28.10      C
ATOM  10185  N    GLU D  33      36.560  71.013  84.214  1.00 29.47      N
ATOM  10186  CA   GLU D  33      36.495  69.570  84.455  1.00 30.12      C
ATOM  10187  C    GLU D  33      35.047  69.067  84.284  1.00 28.99      C
ATOM  10188  O    GLU D  33      34.837  67.953  83.817  1.00 29.66      O
ATOM  10189  CB   GLU D  33      37.003  69.227  85.866  1.00 32.83      C
ATOM  10190  CG   GLU D  33      38.473  69.641  86.192  1.00 36.76      C
ATOM  10191  CD   GLU D  33      38.737  71.171  86.104  1.00 39.80      C
ATOM  10192  OE1  GLU D  33      37.912  71.985  86.592  1.00 40.05      O
ATOM  10193  OE2  GLU D  33      39.794  71.561  85.544  1.00 42.99      O
ATOM  10194  N    ASP D  34      34.067  69.892  84.670  1.00 28.69      N
ATOM  10195  CA   ASP D  34      32.634  69.552  84.554  1.00 26.27      C
ATOM  10196  C    ASP D  34      32.294  69.255  83.083  1.00 25.45      C
ATOM  10197  O    ASP D  34      31.575  68.285  82.774  1.00 22.01      O
ATOM  10198  CB   ASP D  34      31.759  70.723  85.035  1.00 24.99      C
ATOM  10199  CG   ASP D  34      31.717  70.851  86.550  1.00 25.85      C
ATOM  10200  OD1  ASP D  34      31.907  69.835  87.268  1.00 28.10      O
ATOM  10201  OD2  ASP D  34      31.460  71.974  87.036  1.00 28.27      O
ATOM  10202  N    VAL D  35      32.821  70.101  82.197  1.00 22.80      N
ATOM  10203  CA   VAL D  35      32.618  69.983  80.761  1.00 22.94      C
ATOM  10204  C    VAL D  35      33.172  68.685  80.239  1.00 23.32      C
ATOM  10205  O    VAL D  35      32.477  67.926  79.524  1.00 21.67      O
ATOM  10206  CB   VAL D  35      33.260  71.142  79.995  1.00 21.03      C
ATOM  10207  CG1  VAL D  35      33.154  70.882  78.477  1.00 22.69      C
ATOM  10208  CG2  VAL D  35      32.537  72.424  80.301  1.00 22.19      C
ATOM  10209  N    VAL D  36      34.422  68.397  80.601  1.00 23.39      N
ATOM  10210  CA   VAL D  36      35.060  67.162  80.170  1.00 23.74      C
ATOM  10211  C    VAL D  36      34.277  65.927  80.622  1.00 23.49      C
ATOM  10212  O    VAL D  36      34.185  64.939  79.902  1.00 25.41      O
ATOM  10213  CB   VAL D  36      36.509  67.056  80.748  1.00 25.04      C
ATOM  10214  CG1  VAL D  36      37.165  65.775  80.283  1.00 25.68      C
ATOM  10215  CG2  VAL D  36      37.327  68.301  80.346  1.00 25.24      C
ATOM  10216  N    ALA D  37      33.741  65.978  81.835  1.00 22.15      N
ATOM  10217  CA   ALA D  37      32.983  64.867  82.387  1.00 22.77      C
ATOM  10218  C    ALA D  37      31.786  64.506  81.507  1.00 21.45      C
ATOM  10219  O    ALA D  37      31.362  63.364  81.521  1.00 22.18      O
ATOM  10220  CB   ALA D  37      32.480  65.207  83.797  1.00 20.33      C
ATOM  10221  N    LEU D  38      31.243  65.481  80.775  1.00 21.72      N
ATOM  10222  CA   LEU D  38      30.051  65.224  79.918  1.00 22.70      C
ATOM  10223  C    LEU D  38      30.331  64.871  78.447  1.00 24.18      C
ATOM  10224  O    LEU D  38      29.396  64.615  77.658  1.00 22.10      O
ATOM  10225  CB   LEU D  38      29.134  66.451  79.942  1.00 21.70      C
ATOM  10226  CG   LEU D  38      28.718  66.896  81.338  1.00 20.54      C
ATOM  10227  CD1  LEU D  38      28.143  68.293  81.301  1.00 22.43      C
ATOM  10228  CD2  LEU D  38      27.744  65.855  81.885  1.00 19.75      C
ATOM  10229  N    GLN D  39      31.603  64.880  78.064  1.00 23.46      N
ATOM  10230  CA   GLN D  39      31.965  64.630  76.676  1.00 24.44      C
ATOM  10231  C    GLN D  39      32.195  63.184  76.242  1.00 23.47      C
ATOM  10232  O    GLN D  39      32.434  62.934  75.073  1.00 25.95      O
ATOM  10233  CB   GLN D  39      33.197  65.482  76.325  1.00 21.55      C
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| ATOM | 10234 | CG | GLN D | 39 | 32.897 | 66.958 | 76.287 | 1.00 | 24.07 | C |
|------|-------|----|-------|----|--------|--------|--------|------|-------|---|
| ATOM | 10235 | CD | GLN D | 39 | 34.135 | 67.776 | 76.007 | 1.00 | 27.12 | C |
| ATOM | 10236 | OE1 | GLN D | 39 | 35.214 | 67.466 | 76.528 | 1.00 | 28.54 | O |
| ATOM | 10237 | NE2 | GLN D | 39 | 33.997 | 68.824 | 75.201 | 1.00 | 26.83 | N |
| ATOM | 10238 | N | GLY D | 40 | 32.118 | 62.231 | 77.151 | 1.00 | 23.72 | N |
| ATOM | 10239 | CA | GLY D | 40 | 32.361 | 60.844 | 76.761 | 1.00 | 25.74 | C |
| ATOM | 10240 | C | GLY D | 40 | 33.798 | 60.706 | 76.243 | 1.00 | 26.93 | C |
| ATOM | 10241 | O | GLY D | 40 | 34.674 | 61.470 | 76.654 | 1.00 | 28.15 | O |
| ATOM | 10242 | N | SER D | 41 | 34.068 | 59.759 | 75.352 | 1.00 | 26.84 | N |
| ATOM | 10243 | CA | SER D | 41 | 35.442 | 59.628 | 74.846 | 1.00 | 28.12 | C |
| ATOM | 10244 | C | SER D | 41 | 35.651 | 60.149 | 73.421 | 1.00 | 27.63 | C |
| ATOM | 10245 | O | SER D | 41 | 36.752 | 60.073 | 72.866 | 1.00 | 26.68 | O |
| ATOM | 10246 | CB | SER D | 41 | 35.922 | 58.179 | 74.964 | 1.00 | 27.45 | C |
| ATOM | 10247 | OG | SER D | 41 | 35.058 | 57.305 | 74.297 | 1.00 | 33.61 | O |
| ATOM | 10248 | N | VAL D | 42 | 34.606 | 60.720 | 72.837 | 1.00 | 26.02 | N |
| ATOM | 10249 | CA | VAL D | 42 | 34.703 | 61.242 | 71.486 | 1.00 | 26.12 | C |
| ATOM | 10250 | C | VAL D | 42 | 33.891 | 62.507 | 71.365 | 1.00 | 24.29 | C |
| ATOM | 10251 | O | VAL D | 42 | 32.770 | 62.582 | 71.846 | 1.00 | 27.32 | O |
| ATOM | 10252 | CB | VAL D | 42 | 34.168 | 60.236 | 70.461 | 1.00 | 27.62 | C |
| ATOM | 10253 | CG1 | VAL D | 42 | 34.218 | 60.840 | 69.045 | 1.00 | 26.10 | C |
| ATOM | 10254 | CG2 | VAL D | 42 | 34.973 | 58.954 | 70.539 | 1.00 | 28.38 | C |
| ATOM | 10255 | N | VAL D | 43 | 34.477 | 63.518 | 70.764 | 1.00 | 23.82 | N |
| ATOM | 10256 | CA | VAL D | 43 | 33.773 | 64.755 | 70.552 | 1.00 | 23.99 | C |
| ATOM | 10257 | C | VAL D | 43 | 33.647 | 65.000 | 69.051 | 1.00 | 24.84 | C |
| ATOM | 10258 | O | VAL D | 43 | 34.640 | 65.168 | 68.356 | 1.00 | 24.71 | O |
| ATOM | 10259 | CB | VAL D | 43 | 34.498 | 65.956 | 71.196 | 1.00 | 23.71 | C |
| ATOM | 10260 | CG1 | VAL D | 43 | 33.745 | 67.231 | 70.893 | 1.00 | 23.09 | C |
| ATOM | 10261 | CG2 | VAL D | 43 | 34.565 | 65.759 | 72.698 | 1.00 | 24.32 | C |
| ATOM | 10262 | N | GLU D | 44 | 32.432 | 64.987 | 68.521 | 1.00 | 25.13 | N |
| ATOM | 10263 | CA | GLU D | 44 | 32.300 | 65.278 | 67.113 | 1.00 | 23.44 | C |
| ATOM | 10264 | C | GLU D | 44 | 32.662 | 66.737 | 66.802 | 1.00 | 23.69 | C |
| ATOM | 10265 | O | GLU D | 44 | 32.260 | 67.686 | 67.507 | 1.00 | 23.82 | O |
| ATOM | 10266 | CB | GLU D | 44 | 30.868 | 65.038 | 66.631 | 1.00 | 21.93 | C |
| ATOM | 10267 | CG | GLU D | 44 | 30.400 | 63.588 | 66.717 | 1.00 | 24.39 | C |
| ATOM | 10268 | CD | GLU D | 44 | 28.968 | 63.487 | 66.259 | 1.00 | 23.67 | C |
| ATOM | 10269 | OE1 | GLU D | 44 | 28.087 | 63.725 | 67.103 | 1.00 | 24.22 | O |
| ATOM | 10270 | OE2 | GLU D | 44 | 28.741 | 63.222 | 65.063 | 1.00 | 21.92 | O |
| ATOM | 10271 | N | GLU D | 45 | 33.392 | 66.917 | 65.710 | 1.00 | 22.99 | N |
| ATOM | 10272 | CA | GLU D | 45 | 33.745 | 68.241 | 65.255 | 1.00 | 23.99 | C |
| ATOM | 10273 | C | GLU D | 45 | 32.490 | 68.809 | 64.592 | 1.00 | 24.62 | C |
| ATOM | 10274 | O | GLU D | 45 | 31.787 | 68.088 | 63.885 | 1.00 | 26.07 | O |
| ATOM | 10275 | CB | GLU D | 45 | 34.880 | 68.121 | 64.241 | 1.00 | 26.61 | C |
| ATOM | 10276 | CG | GLU D | 45 | 35.194 | 69.367 | 63.453 | 1.00 | 28.39 | C |
| ATOM | 10277 | CD | GLU D | 45 | 35.690 | 70.483 | 64.335 | 1.00 | 30.88 | C |
| ATOM | 10278 | OE1 | GLU D | 45 | 36.105 | 70.187 | 65.473 | 1.00 | 33.60 | O |
| ATOM | 10279 | OE2 | GLU D | 45 | 35.676 | 71.645 | 63.886 | 1.00 | 32.78 | O |
| ATOM | 10280 | N | HIS D | 46 | 32.179 | 70.075 | 64.845 | 1.00 | 23.22 | N |
| ATOM | 10281 | CA | HIS D | 46 | 31.015 | 70.740 | 64.239 | 1.00 | 22.84 | C |
| ATOM | 10282 | C | HIS D | 46 | 31.580 | 71.910 | 63.409 | 1.00 | 21.75 | C |
| ATOM | 10283 | O | HIS D | 46 | 31.607 | 73.074 | 63.852 | 1.00 | 22.47 | O |
| ATOM | 10284 | CB | HIS D | 46 | 30.042 | 71.242 | 65.320 | 1.00 | 21.11 | C |
| ATOM | 10285 | CG | HIS D | 46 | 29.445 | 70.143 | 66.133 | 1.00 | 21.32 | C |
| ATOM | 10286 | ND1 | HIS D | 46 | 28.661 | 69.155 | 65.578 | 1.00 | 22.76 | N |
| ATOM | 10287 | CD2 | HIS D | 46 | 29.593 | 69.817 | 67.437 | 1.00 | 21.29 | C |
| ATOM | 10288 | CE1 | HIS D | 46 | 28.361 | 68.261 | 66.501 | 1.00 | 21.30 | C |
| ATOM | 10289 | NE2 | HIS D | 46 | 28.917 | 68.637 | 67.639 | 1.00 | 23.66 | N |
| ATOM | 10290 | N | THR D | 47 | 32.009 | 71.573 | 62.191 | 1.00 | 22.05 | N |
| ATOM | 10291 | CA | THR D | 47 | 32.665 | 72.514 | 61.301 | 1.00 | 21.90 | C |
| ATOM | 10292 | C | THR D | 47 | 31.916 | 73.787 | 61.043 | 1.00 | 23.01 | C |
| ATOM | 10293 | O | THR D | 47 | 32.432 | 74.876 | 61.317 | 1.00 | 24.64 | O |
| ATOM | 10294 | CB | THR D | 47 | 33.051 | 71.797 | 59.960 | 1.00 | 20.64 | C |
| ATOM | 10295 | OG1 | THR D | 47 | 33.858 | 70.670 | 60.265 | 1.00 | 21.63 | O |
| ATOM | 10296 | CG2 | THR D | 47 | 33.830 | 72.694 | 59.051 | 1.00 | 25.36 | C |
| ATOM | 10297 | N | LEU D | 48 | 30.688 | 73.700 | 60.536 | 1.00 | 21.33 | N |
| ATOM | 10298 | CA | LEU D | 48 | 29.993 | 74.936 | 60.262 | 1.00 | 19.80 | C |
| ATOM | 10299 | C | LEU D | 48 | 29.626 | 75.723 | 61.532 | 1.00 | 19.83 | C |
| ATOM | 10300 | O | LEU D | 48 | 29.643 | 76.952 | 61.516 | 1.00 | 21.58 | O |
| ATOM | 10301 | CB | LEU D | 48 | 28.747 | 74.655 | 59.405 | 1.00 | 19.04 | C |
| ATOM | 10302 | CG | LEU D | 48 | 29.050 | 73.927 | 58.096 | 1.00 | 18.69 | C |
| ATOM | 10303 | CD1 | LEU D | 48 | 27.753 | 73.861 | 57.271 | 1.00 | 19.55 | C |
| ATOM | 10304 | CD2 | LEU D | 48 | 30.115 | 74.732 | 57.295 | 1.00 | 21.08 | C |
| ATOM | 10305 | N | ALA D | 49 | 29.333 | 75.045 | 62.640 | 1.00 | 18.72 | N |
| ATOM | 10306 | CA | ALA D | 49 | 28.991 | 75.772 | 63.857 | 1.00 | 18.14 | C |
| ATOM | 10307 | C | ALA D | 49 | 30.226 | 76.595 | 64.337 | 1.00 | 19.95 | C |
| ATOM | 10308 | O | ALA D | 49 | 30.117 | 77.747 | 64.759 | 1.00 | 20.06 | O |
| ATOM | 10309 | CB | ALA D | 49 | 28.571 | 74.772 | 64.954 | 1.00 | 17.60 | C |
| ATOM | 10310 | N | ARG D | 50 | 31.388 | 75.985 | 64.261 | 1.00 | 20.92 | N |
| ATOM | 10311 | CA | ARG D | 50 | 32.597 | 76.655 | 64.707 | 1.00 | 23.08 | C |
| ATOM | 10312 | C | ARG D | 50 | 32.932 | 77.788 | 63.767 | 1.00 | 22.41 | C |
| ATOM | 10313 | O | ARG D | 50 | 33.035 | 78.941 | 64.196 | 1.00 | 25.34 | O |

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ATOM   10314  CB   ARG D  50      33.762  75.672  64.784  1.00 22.81           C
ATOM   10315  CG   ARG D  50      35.076  76.335  65.271  1.00 23.99           C
ATOM   10316  CD   ARG D  50      36.252  75.353  65.188  1.00 22.64           C
ATOM   10317  NE   ARG D  50      35.938  74.078  65.812  1.00 26.25           N
ATOM   10318  CZ   ARG D  50      35.833  73.879  67.119  1.00 26.06           C
ATOM   10319  NH1  ARG D  50      36.019  74.895  67.946  1.00 27.53           N
ATOM   10320  NH2  ARG D  50      35.572  72.658  67.598  1.00 26.74           N
ATOM   10321  N    ARG D  51      33.088  77.797  62.485  1.00 23.18           N
ATOM   10322  CA   ARG D  51      33.406  78.509  61.502  1.00 23.65           C
ATOM   10323  C    ARG D  51      32.404  79.644  61.603  1.00 23.42           C
ATOM   10324  O    ARG D  51      32.772  80.813  61.676  1.00 23.92           O
ATOM   10325  CB   ARG D  51      33.369  77.937  60.088  1.00 24.33           C
ATOM   10326  CG   ARG D  51      34.061  78.831  59.040  1.00 27.40           C
ATOM   10327  CD   ARG D  51      33.790  78.253  57.657  1.00 27.60           C
ATOM   10328  NE   ARG D  51      34.534  78.915  56.584  1.00 29.43           N
ATOM   10329  CZ   ARG D  51      34.098  79.938  55.862  1.00 28.29           C
ATOM   10330  NH1  ARG D  51      32.898  80.483  56.066  1.00 29.84           N
ATOM   10331  NH2  ARG D  51      34.867  80.397  54.878  1.00 31.39           N
ATOM   10332  N    GLY D  52      31.118  79.322  61.634  1.00 22.52           N
ATOM   10333  CA   GLY D  52      30.122  80.378  61.725  1.00 22.56           C
ATOM   10334  C    GLY D  52      30.243  81.245  62.973  1.00 22.62           C
ATOM   10335  O    GLY D  52      30.115  82.465  62.885  1.00 23.35           O
ATOM   10336  N    ALA D  53      30.460  80.609  64.130  1.00 24.16           N
ATOM   10337  CA   ALA D  53      30.597  81.337  65.389  1.00 23.45           C
ATOM   10338  C    ALA D  53      31.837  82.251  65.295  1.00 25.83           C
ATOM   10339  O    ALA D  53      31.753  83.446  65.608  1.00 25.99           O
ATOM   10340  CB   ALA D  53      30.748  80.333  66.547  1.00 23.89           C
ATOM   10341  N    GLU D  54      32.976  81.704  64.878  1.00 26.18           N
ATOM   10342  CA   GLU D  54      34.166  82.543  64.763  1.00 26.93           C
ATOM   10343  C    GLU D  54      33.885  83.729  63.852  1.00 27.58           C
ATOM   10344  O    GLU D  54      34.053  84.864  64.282  1.00 29.08           O
ATOM   10345  CB   GLU D  54      35.337  81.710  64.288  1.00 28.76           C
ATOM   10346  CG   GLU D  54      35.852  80.839  65.407  1.00 32.20           C
ATOM   10347  CD   GLU D  54      36.977  79.953  64.982  1.00 32.96           C
ATOM   10348  OE1  GLU D  54      37.412  80.038  63.810  1.00 38.76           O
ATOM   10349  OE2  GLU D  54      37.438  79.168  65.822  1.00 37.42           O
ATOM   10350  N    VAL D  55      33.389  83.495  62.630  1.00 26.62           N
ATOM   10351  CA   VAL D  55      33.087  84.587  61.724  1.00 26.85           C
ATOM   10352  C    VAL D  55      32.137  85.640  62.280  1.00 27.97           C
ATOM   10353  O    VAL D  55      32.368  86.850  62.112  1.00 28.85           O
ATOM   10354  CB   VAL D  55      32.502  84.072  60.380  1.00 26.23           C
ATOM   10355  CG1  VAL D  55      32.054  85.249  59.496  1.00 23.60           C
ATOM   10356  CG2  VAL D  55      33.522  83.261  59.677  1.00 25.43           C
ATOM   10357  N    LEU D  56      31.056  85.202  62.923  1.00 26.91           N
ATOM   10358  CA   LEU D  56      30.096  86.141  63.482  1.00 26.73           C
ATOM   10359  C    LEU D  56      30.750  87.015  64.562  1.00 28.22           C
ATOM   10360  O    LEU D  56      30.490  88.212  64.654  1.00 29.02           O
ATOM   10361  CB   LEU D  56      28.926  85.377  64.089  1.00 24.50           C
ATOM   10362  CG   LEU D  56      27.842  86.210  64.746  1.00 23.95           C
ATOM   10363  CD1  LEU D  56      27.163  87.151  63.780  1.00 22.53           C
ATOM   10364  CD2  LEU D  56      26.833  85.210  65.330  1.00 22.89           C
ATOM   10365  N    TRP D  57      31.597  86.409  65.374  1.00 30.93           N
ATOM   10366  CA   TRP D  57      32.253  87.164  66.434  1.00 33.24           C
ATOM   10367  C    TRP D  57      33.115  88.258  65.762  1.00 34.03           C
ATOM   10368  O    TRP D  57      32.952  89.458  66.052  1.00 33.21           O
ATOM   10369  CB   TRP D  57      33.094  86.222  67.300  1.00 33.12           C
ATOM   10370  CG   TRP D  57      33.581  86.871  68.564  1.00 35.21           C
ATOM   10371  CD1  TRP D  57      34.870  87.153  68.886  1.00 35.10           C
ATOM   10372  CD2  TRP D  57      32.778  87.350  69.659  1.00 35.30           C
ATOM   10373  NE1  TRP D  57      34.930  87.780  70.110  1.00 35.38           N
ATOM   10374  CE2  TRP D  57      33.661  87.913  70.607  1.00 36.09           C
ATOM   10375  CE3  TRP D  57      31.396  87.358  69.932  1.00 35.44           C
ATOM   10376  CZ2  TRP D  57      33.207  88.479  71.817  1.00 35.44           C
ATOM   10377  CZ3  TRP D  57      30.947  87.915  71.127  1.00 33.42           C
ATOM   10378  CH2  TRP D  57      31.851  88.469  72.056  1.00 34.63           C
ATOM   10379  N    GLU D  58      33.996  87.845  64.847  1.00 35.26           N
ATOM   10380  CA   GLU D  58      34.840  88.791  64.126  1.00 35.32           C
ATOM   10381  C    GLU D  58      34.033  89.894  63.490  1.00 35.36           C
ATOM   10382  O    GLU D  58      34.398  91.061  63.591  1.00 35.43           O
ATOM   10383  CB   GLU D  58      35.615  88.095  63.032  1.00 38.54           C
ATOM   10384  CG   GLU D  58      36.741  87.243  63.519  1.00 41.85           C
ATOM   10385  CD   GLU D  58      37.341  86.427  62.392  1.00 45.76           C
ATOM   10386  OE1  GLU D  58      37.716  87.033  61.355  1.00 46.97           O
ATOM   10387  OE2  GLU D  58      37.432  85.182  62.540  1.00 48.54           O
ATOM   10388  N    GLN D  59      32.936  89.545  62.821  1.00 34.58           N
ATOM   10389  CA   GLN D  59      32.141  90.566  62.171  1.00 32.71           C
ATOM   10390  C    GLN D  59      31.527  91.532  63.141  1.00 33.42           C
ATOM   10391  O    GLN D  59      31.513  92.735  62.875  1.00 33.77           O
ATOM   10392  CB   GLN D  59      31.053  89.949  61.295  1.00 33.98           C
ATOM   10393  CG   GLN D  59      31.621  89.026  60.213  1.00 34.22           C
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| ATOM | 10394 | CD | GLN | D | 59 | 30.527 | 88.484 | 59.308 | 1.00 | 34.88 | C |
|------|-------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 10395 | OE1 | GLN | D | 59 | 29.392 | 88.283 | 59.749 | 1.00 | 34.05 | O |
| ATOM | 10396 | NE2 | GLN | D | 59 | 30.861 | 88.241 | 58.051 | 1.00 | 33.85 | N |
| ATOM | 10397 | N | LEU | D | 60 | 31.030 | 91.033 | 64.269 | 1.00 | 32.06 | N |
| ATOM | 10398 | CA | LEU | D | 60 | 30.415 | 91.896 | 65.269 | 1.00 | 33.14 | C |
| ATOM | 10399 | C | LEU | D | 60 | 31.377 | 93.010 | 65.738 | 1.00 | 34.70 | C |
| ATOM | 10400 | O | LEU | D | 60 | 30.944 | 94.126 | 66.073 | 1.00 | 36.47 | O |
| ATOM | 10401 | CB | LEU | D | 60 | 29.932 | 91.051 | 66.458 | 1.00 | 31.67 | C |
| ATOM | 10402 | CG | LEU | D | 60 | 28.600 | 90.347 | 66.165 | 1.00 | 30.67 | C |
| ATOM | 10403 | CD1 | LEU | D | 60 | 28.262 | 89.324 | 67.240 | 1.00 | 30.31 | C |
| ATOM | 10404 | CD2 | LEU | D | 60 | 27.524 | 91.362 | ·66.062 | 1.00 | 30.12 | C |
| ATOM | 10405 | N | HIS | D | 61 | 32.669 | 92.714 | 65.736 | 1.00 | 36.02 | N |
| ATOM | 10406 | CA | HIS | D | 61 | 33.664 | 93.701 | 66.134 | 1.00 | 39.87 | C |
| ATOM | 10407 | C | HIS | D | 61 | 34.306 | 94.464 | 64.960 | 1.00 | 40.79 | C |
| ATOM | 10408 | O | HIS | D | 61 | 34.921 | 95.505 | 65.175 | 1.00 | 41.09 | O |
| ATOM | 10409 | CB | HIS | D | 61 | 34.779 | 93.041 | 66.945 | 1.00 | 39.49 | C |
| ATOM | 10410 | CG | HIS | D | 61 | 34.326 | 92.474 | 68.252 | 1.00 | 41.94 | C |
| ATOM | 10411 | ND1 | HIS | D | 61 | 33.732 | 91.237 | 68.359 | 1.00 | 42.14 | N |
| ATOM | 10412 | CD2 | HIS | D | 61 | 34.410 | 92.958 | 69.513 | 1.00 | 41.84 | C |
| ATOM | 10413 | CE1 | HIS | D | 61 | 33.476 | 90.981 | 69.629 | 1.00 | 41.60 | C |
| ATOM | 10414 | NE2 | HIS | D | 61 | 33.878 | 92.009 | 70.351 | 1.00 | 41.66 | N |
| ATOM | 10415 | N | ASP | D | 62 | 34.167 | 93.969 | 63.728 | 1.00 | 41.76 | N |
| ATOM | 10416 | CA | ASP | D | 62 | 34.803 | 94.652 | 62.592 | 1.00 | 41.66 | C |
| ATOM | 10417 | C | ASP | D | 62 | 33.934 | 95.483 | 61.686 | 1.00 | 41.21 | C |
| ATOM | 10418 | O | ASP | D | 62 | 34.460 | 96.294 | 60.931 | 1.00 | 43.58 | O |
| ATOM | 10419 | CB | ASP | D | 62 | 35.588 | 93.666 | 61.727 | 1.00 | 41.54 | C |
| ATOM | 10420 | CG | ASP | D | 62 | 36.686 | 92.967 | 62.491 | 1.00 | 42.57 | C |
| ATOM | 10421 | OD1 | ASP | D | 62 | 37.140 | 93.507 | 63.526 | 1.00 | 42.64 | O |
| ATOM | 10422 | OD2 | ASP | D | 62 | 37.106 | 91.873 | 62.045 | 1.00 | 43.52 | O |
| ATOM | 10423 | N | LEU | D | 63 | 32.622 | 95.310 | 61.744 | 1.00 | 40.10 | N |
| ATOM | 10424 | CA | LEU | D | 63 | 31.723 | 96.088 | 60.895 | 1.00 | 38.53 | C |
| ATOM | 10425 | C | LEU | D | 63 | 31.038 | 97.134 | 61.754 | 1.00 | 38.12 | C |
| ATOM | 10426 | O | LEU | D | 63 | 31.074 | 97.046 | 62.978 | 1.00 | 38.53 | O |
| ATOM | 10427 | CB | LEU | D | 63 | 30.662 | 95.185 | 60.244 | 1.00 | 37.97 | C |
| ATOM | 10428 | CG | LEU | D | 63 | 31.193 | 93.953 | 59.518 | 1.00 | 38.34 | C |
| ATOM | 10429 | CD1 | LEU | D | 63 | 30.026 | 93.127 | 58.998 | 1.00 | 37.68 | C |
| ATOM | 10430 | CD2 | LEU | D | 63 | 32.090 | 94.379 | 58.371 | 1.00 | 37.85 | C |
| ATOM | 10431 | N | GLU | D | 64 | 30.423 | 98.124 | 61.119 | 1.00 | 38.15 | N |
| ATOM | 10432 | CA | GLU | D | 64 | 29.734 | 99.172 | 61.872 | 1.00 | 39.99 | C |
| ATOM | 10433 | C | GLU | D | 64 | 28.652 | 98.450 | 62.672 | 1.00 | 38.86 | C |
| ATOM | 10434 | O | GLU | D | 64 | 28.434 | 98.722 | 63.852 | 1.00 | 39.88 | O |
| ATOM | 10435 | CB | GLU | D | 64 | 29.104 | 100.197 | 60.923 | 1.00 | 41.01 | C |
| ATOM | 10436 | CG | GLU | D | 64 | 29.199 | 101.637 | 61.423 | 1.00 | 44.65 | C |
| ATOM | 10437 | CD | GLU | D | 64 | 28.619 | 102.638 | 60.446 | 1.00 | 45.98 | C |
| ATOM | 10438 | OE1 | GLU | D | 64 | 29.019 | 102.611 | 59.254 | 1.00 | 48.03 | O |
| ATOM | 10439 | OE2 | GLU | D | 64 | 27.766 | 103.456 | 60.867 | 1.00 | 47.71 | O |
| ATOM | 10440 | N | TRP | D | 65 | 27.984 | 97.519 | 61.999 | 1.00 | 38.07 | N |
| ATOM | 10441 | CA | TRP | D | 65 | 26.951 | 96.696 | 62.604 | 1.00 | 35.41 | C |
| ATOM | 10442 | C | TRP | D | 65 | 26.633 | 95.571 | 61.632 | 1.00 | 35.30 | C |
| ATOM | 10443 | O | TRP | D | 65 | 27.011 | 95.613 | 60.449 | 1.00 | 34.78 | O |
| ATOM | 10444 | CB | TRP | D | 65 | 25.695 | 97.509 | 62.946 | 1.00 | 35.74 | C |
| ATOM | 10445 | CG | TRP | D | 65 | 24.706 | 97.801 | 61.849 | 1.00 | 36.79 | C |
| ATOM | 10446 | CD1 | TRP | D | 65 | 23.625 | 97.043 | 61.497 | 1.00 | 37.09 | C |
| ATOM | 10447 | CD2 | TRP | D | 65 | 24.626 | 99.000 | 61.051 | 1.00 | 38.09 | C |
| ATOM | 10448 | NE1 | TRP | D | 65 | 22.872 | 97.690 | 60.550 | 1.00 | 37.62 | N |
| ATOM | 10449 | CE2 | TRP | D | 65 | 23.465 | 98.893 | 60.254 | 1.00 | 39.00 | C |
| ATOM | 10450 | CE3 | TRP | D | 65 | 25.423 | 100.153 | 60.939 | 1.00 | 38.37 | C |
| ATOM | 10451 | CZ2 | TRP | D | 65 | 23.076 | 99.906 | 59.345 | 1.00 | 38.69 | C |
| ATOM | 10452 | CZ3 | TRP | D | 65 | 25.038 | 101.159 | 60.042 | 1.00 | 38.25 | C |
| ATOM | 10453 | CH2 | TRP | D | 65 | 23.872 | 101.026 | 59.255 | 1.00 | 38.22 | C |
| ATOM | 10454 | N | VAL | D | 66 | 25.976 | 94.543 | 62.154 | 1.00 | 33.14 | N |
| ATOM | 10455 | CA | VAL | D | 66 | 25.613 | 93.375 | 61.361 | 1.00 | 31.04 | C |
| ATOM | 10456 | C | VAL | D | 66 | 24.109 | 93.326 | 61.236 | 1.00 | 29.96 | C |
| ATOM | 10457 | O | VAL | D | 66 | 23.430 | 93.269 | 62.250 | 1.00 | 31.48 | O |
| ATOM | 10458 | CB | VAL | D | 66 | 26.034 | 92.089 | 62.045· | 1.00 | 29.30 | C |
| ATOM | 10459 | CG1 | VAL | D | 66 | 25.402 | 90.882 | 61.281 | 1.00 | 30.45 | C |
| ATOM | 10460 | CG2 | VAL | D | 66 | 27.540 | 91.966 | 62.066 | 1.00 | 29.21 | C |
| ATOM | 10461 | N | ASN | D | 67 | 23.576 | 93.363 | 60.013 | 1.00 | 28.61 | N |
| ATOM | 10462 | CA | ASN | D | 67 | 22.135 | 93.262 | 59.874 | 1.00 | 27.77 | C |
| ATOM | 10463 | C | ASN | D | 67 | 21.734 | 91.952 | 59.223 | 1.00 | 26.49 | C |
| ATOM | 10464 | O | ASN | D | 67 | 22.591 | 91.180 | 58.771 | 1.00 | 25.66 | O |
| ATOM | 10465 | CB | ASN | D | 67 | 21.526 | 94.433 | 59.100 | 1.00 | 29.65 | C |
| ATOM | 10466 | CG | ASN | D | 67 | 22.252 | 94.739 | 57.801 | 1.00 | 31.33 | C |
| ATOM | 10467 | OD1 | ASN | D | 67 | 22.905 | 93.882 | 57.203 | 1.00 | 33.99 | O |
| ATOM | 10468 | ND2 | ASN | D | 67 | 22.123 | 95.979 | 57.351 | 1.00 | 32.11 | N |
| ATOM | 10469 | N | ALA | D | 68 | 20.432 | 91.691 | 59.220 | 1.00 | 24.79 | N |
| ATOM | 10470 | CA | ALA | D | 68 | 19.931 | 90.461 | 58.610 | 1.00 | 22.47 | C |
| ATOM | 10471 | C | ALA | D | 68 | 18.422 | 90.491 | 58.447 | 1.00 | 23.53 | C |
| ATOM | 10472 | O | ALA | D | 68 | 17.710 | 91.300 | 59.072 | 1.00 | 24.39 | O |
| ATOM | 10473 | CB | ALA | D | 68 | 20.345 | 89.249 | 59.465 | 1.00 | 24.08 | C |

| ATOM | 10474 | N | LEU D | 69 | 17.953 | 89.591 | 57.583 | 1.00 | 22.07 | N |
|------|-------|-----|-------|-----|--------|--------|--------|------|-------|-----|
| ATOM | 10475 | CA | LEU D | 69 | 16.539 | 89.397 | 57.313 | 1.00 | 21.39 | C |
| ATOM | 10476 | C | LEU D | 69 | 16.198 | 87.956 | 57.741 | 1.00 | 21.18 | C |
| ATOM | 10477 | O | LEU D | 69 | 17.059 | 87.092 | 57.686 | 1.00 | 21.26 | O |
| ATOM | 10478 | CB | LEU D | 69 | 16.288 | 89.527 | 55.821 | 1.00 | 20.68 | C |
| ATOM | 10479 | CG | LEU D | 69 | 16.682 | 90.898 | 55.277 | 1.00 | 21.91 | C |
| ATOM | 10480 | CD1 | LEU D | 69 | 16.389 | 90.947 | 53.784 | 1.00 | 23.05 | C |
| ATOM | 10481 | CD2 | LEU D | 69 | 15.923 | 91.983 | 56.046 | 1.00 | 21.20 | C |
| ATOM | 10482 | N | GLY D | 70 | 14.960 | 87.713 | 58.162 | 1.00 | 22.04 | N |
| ATOM | 10483 | CA | GLY D | 70 | 14.588 | 86.353 | 58.555 | 1.00 | 23.15 | C |
| ATOM | 10484 | C | GLY D | 70 | 14.560 | 85.492 | 57.311 | 1.00 | 22.53 | C |
| ATOM | 10485 | O | GLY D | 70 | 14.097 | 85.962 | 56.267 | 1.00 | 23.02 | O |
| ATOM | 10486 | N | ALA D | 71 | 15.085 | 84.261 | 57.401 | 1.00 | 20.92 | N |
| ATOM | 10487 | CA | ALA D | 71 | 15.082 | 83.322 | 56.267 | 1.00 | 20.33 | C |
| ATOM | 10488 | C | ALA D | 71 | 14.349 | 82.058 | 56.734 | 1.00 | 20.22 | C |
| ATOM | 10489 | O | ALA D | 71 | 14.645 | 81.548 | 57.821 | 1.00 | 18.91 | O |
| ATOM | 10490 | CB | ALA D | 71 | 16.500 | 82.954 | 55.871 | 1.00 | 18.36 | C |
| ATOM | 10491 | N | LEU D | 72 | 13.387 | 81.596 | 55.938 | 1.00 | 20.38 | N |
| ATOM | 10492 | CA | LEU D | 72 | 12.662 | 80.388 | 56.292 | 1.00 | 20.56 | C |
| ATOM | 10493 | C | LEU D | 72 | 12.876 | 79.289 | 55.260 | 1.00 | 19.59 | C |
| ATOM | 10494 | O | LEU D | 72 | 12.387 | 78.176 | 55.453 | 1.00 | 20.31 | O |
| ATOM | 10495 | CB | LEU D | 72 | 11.173 | 80.648 | 56.473 | 1.00 | 21.08 | C |
| ATOM | 10496 | CG | LEU D | 72 | 10.404 | 81.051 | 55.228 | 1.00 | 20.92 | C |
| ATOM | 10497 | CD1 | LEU D | 72 | 9.242 | 80.066 | 55.053 | 1.00 | 20.77 | C |
| ATOM | 10498 | CD2 | LEU D | 72 | 9.894 | 82.448 | 55.404 | 1.00 | 21.95 | C |
| ATOM | 10499 | N | THR D | 73 | 13.529 | 79.596 | 54.138 | 1.00 | 18.57 | N |
| ATOM | 10500 | CA | THR D | 73 | 13.872 | 78.541 | 53.194 | 1.00 | 20.05 | C |
| ATOM | 10501 | C | THR D | 73 | 15.347 | 78.659 | 52.829 | 1.00 | 20.37 | C |
| ATOM | 10502 | O | THR D | 73 | 15.991 | 79.696 | 53.063 | 1.00 | 23.08 | O |
| ATOM | 10503 | CB | THR D | 73 | 13.012 | 78.518 | 51.905 | 1.00 | 17.83 | C |
| ATOM | 10504 | OG1 | THR D | 73 | 13.503 | 79.470 | 50.945 | 1.00 | 19.69 | O |
| ATOM | 10505 | CG2 | THR D | 73 | 11.583 | 78.782 | 52.259 | 1.00 | 20.49 | C |
| ATOM | 10506 | N | GLY D | 74 | 15.920 | 77.586 | 52.311 | 1.00 | 21.05 | N |
| ATOM | 10507 | CA | GLY D | 74 | 17.328 | 77.661 | 51.946 | 1.00 | 20.87 | C |
| ATOM | 10508 | C | GLY D | 74 | 17.597 | 78.664 | 50.811 | 1.00 | 21.60 | C |
| ATOM | 10509 | O | GLY D | 74 | 18.653 | 79.354 | 50.804 | 1.00 | 21.10 | O |
| ATOM | 10510 | N | ASN D | 75 | 16.678 | 78.751 | 49.845 | 1.00 | 18.76 | N |
| ATOM | 10511 | CA | ASN D | 75 | 16.890 | 79.684 | 48.727 | 1.00 | 20.54 | C |
| ATOM | 10512 | C | ASN D | 75 | 16.835 | 81.109 | 49.248 | 1.00 | 21.25 | C |
| ATOM | 10513 | O | ASN D | 75 | 17.563 | 81.983 | 48.746 | 1.00 | 23.67 | O |
| ATOM | 10514 | CB | ASN D | 75 | 15.825 | 79.517 | 47.627 | 1.00 | 21.29 | C |
| ATOM | 10515 | CG | ASN D | 75 | 16.018 | 78.252 | 46.771 | 1.00 | 22.42 | C |
| ATOM | 10516 | OD1 | ASN D | 75 | 16.917 | 77.428 | 46.991 | 1.00 | 24.62 | O |
| ATOM | 10517 | ND2 | ASN D | 75 | 15.162 | 78.106 | 45.775 | 1.00 | 21.02 | N |
| ATOM | 10518 | N | MET D | 76 | 15.974 | 81.355 | 50.227 | 1.00 | 21.70 | N |
| ATOM | 10519 | CA | MET D | 76 | 15.827 | 82.689 | 50.830 | 1.00 | 22.32 | C |
| ATOM | 10520 | C | MET D | 76 | 17.167 | 83.206 | 51.327 | 1.00 | 23.75 | C |
| ATOM | 10521 | O | MET D | 76 | 17.502 | 84.381 | 51.117 | 1.00 | 24.11 | O |
| ATOM | 10522 | CB | MET D | 76 | 14.845 | 82.663 | 52.016 | 1.00 | 22.02 | C |
| ATOM | 10523 | CG | MET D | 76 | 13.551 | 83.399 | 51.761 | 1.00 | 23.31 | C |
| ATOM | 10524 | SD | MET D | 76 | 12.360 | 83.416 | 53.068 | 1.00 | 23.44 | S |
| ATOM | 10525 | CE | MET D | 76 | 10.956 | 83.212 | 52.123 | 1.00 | 18.50 | C |
| ATOM | 10526 | N | ALA D | 77 | 17.893 | 82.333 | 52.028 | 1.00 | 23.70 | N |
| ATOM | 10527 | CA | ALA D | 77 | 19.204 | 82.623 | 52.598 | 1.00 | 23.67 | C |
| ATOM | 10528 | C | ALA D | 77 | 20.226 | 82.854 | 51.495 | 1.00 | 23.93 | C |
| ATOM | 10529 | O | ALA D | 77 | 21.055 | 83.773 | 51.587 | 1.00 | 24.32 | O |
| ATOM | 10530 | CB | ALA D | 77 | 19.659 | 81.459 | 53.494 | 1.00 | 21.64 | C |
| ATOM | 10531 | N | VAL D | 78 | 20.174 | 82.013 | 50.465 | 1.00 | 23.01 | N |
| ATOM | 10532 | CA | VAL D | 78 | 21.080 | 82.129 | 49.318 | 1.00 | 22.09 | C |
| ATOM | 10533 | C | VAL D | 78 | 20.921 | 83.505 | 48.671 | 1.00 | 22.15 | C |
| ATOM | 10534 | O | VAL D | 78 | 21.929 | 84.157 | 48.371 | 1.00 | 22.78 | O |
| ATOM | 10535 | CB | VAL D | 78 | 20.820 | 81.034 | 48.223 | 1.00 | 22.28 | C |
| ATOM | 10536 | CG1 | VAL D | 78 | 21.592 | 81.389 | 46.916 | 1.00 | 21.50 | C |
| ATOM | 10537 | CG2 | VAL D | 78 | 21.284 | 79.653 | 48.738 | 1.00 | 19.25 | C |
| ATOM | 10538 | N | GLN D | 79 | 19.685 | 83.969 | 48.496 | 1.00 | 22.31 | N |
| ATOM | 10539 | CA | GLN D | 79 | 19.454 | 85.276 | 47.878 | 1.00 | 24.48 | C |
| ATOM | 10540 | C | GLN D | 79 | 19.899 | 86.408 | 48.787 | 1.00 | 27.14 | C |
| ATOM | 10541 | O | GLN D | 79 | 20.360 | 87.461 | 48.316 | 1.00 | 25.89 | O |
| ATOM | 10542 | CB | GLN D | 79 | 17.981 | 85.466 | 47.546 | 1.00 | 26.97 | C |
| ATOM | 10543 | CG | GLN D | 79 | 17.495 | 84.520 | 46.444 | 1.00 | 29.22 | C |
| ATOM | 10544 | CD | GLN D | 79 | 18.362 | 84.605 | 45.191 | 1.00 | 31.73 | C |
| ATOM | 10545 | OE1 | GLN D | 79 | 18.756 | 85.694 | 44.769 | 1.00 | 31.82 | O |
| ATOM | 10546 | NE2 | GLN D | 79 | 18.642 | 83.461 | 44.582 | 1.00 | 32.53 | N |
| ATOM | 10547 | N | GLN D | 80 | 19.713 | 86.208 | 50.090 | 1.00 | 26.15 | N |
| ATOM | 10548 | CA | GLN D | 80 | 20.135 | 87.200 | 51.068 | 1.00 | 27.02 | C |
| ATOM | 10549 | C | GLN D | 80 | 21.635 | 87.403 | 50.959 | 1.00 | 26.80 | C |
| ATOM | 10550 | O | GLN D | 80 | 22.123 | 88.537 | 50.974 | 1.00 | 29.70 | O |
| ATOM | 10551 | CB | GLN D | 80 | 19.772 | 86.729 | 52.475 | 1.00 | 24.18 | C |
| ATOM | 10552 | CG | GLN D | 80 | 18.328 | 86.834 | 52.695 | 1.00 | 20.46 | C |
| ATOM | 10553 | CD | GLN D | 80 | 17.887 | 86.309 | 54.021 | 1.00 | 21.15 | C |

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ATOM   10554  OE1 GLN D  80    18.681  85.751  54.783  1.00 22.29        O
ATOM   10555  NE2 GLN D  80    16.597  86.482  54.317  1.00 20.93        N
ATOM   10556  N   VAL D  81    22.371  86.312  50.838  1.00 26.27        N
ATOM   10557  CA  VAL D  81    23.808  86.415  50.716  1.00 27.96        C
ATOM   10558  C   VAL D  81    24.198  87.008  49.354  1.00 31.30        C
ATOM   10559  O   VAL D  81    25.032  87.928  49.281  1.00 31.26        O
ATOM   10560  CB  VAL D  81    24.464  85.042  50.914  1.00 27.74        C
ATOM   10561  CG1 VAL D  81    25.952  85.131  50.640  1.00 28.47        C
ATOM   10562  CG2 VAL D  81    24.222  84.547  52.359  1.00 28.24        C
ATOM   10563  N   ARG D  82    23.583  86.503  48.280  1.00 30.28        N
ATOM   10564  CA  ARG D  82    23.877  86.990  46.942  1.00 32.28        C
ATOM   10565  C   ARG D  82    23.743  88.516  46.929  1.00 32.75        C
ATOM   10566  O   ARG D  82    24.618  89.203  46.394  1.00 34.12        O
ATOM   10567  CB  ARG D  82    22.921  86.344  45.911  1.00 31.54        C
ATOM   10568  CG  ARG D  82    23.059  86.865  44.471  1.00 32.22        C
ATOM   10569  CD  ARG D  82    24.390  86.469  43.804  1.00 33.72        C
ATOM   10570  NE  ARG D  82    24.384  85.101  43.272  1.00 33.38        N
ATOM   10571  CZ  ARG D  82    25.465  84.488  42.782  1.00 34.56        C
ATOM   10572  NH1 ARG D  82    26.637  85.127  42.752  1.00 34.20        N
ATOM   10573  NH2 ARG D  82    25.397  83.230  42.348  1.00 31.69        N
ATOM   10574  N   ALA D  83    22.667  89.045  47.523  1.00 31.54        N
ATOM   10575  CA  ALA D  83    22.455  90.490  47.571  1.00 31.41        C
ATOM   10576  C   ALA D  83    23.462  91.257  48.443  1.00 30.98        C
ATOM   10577  O   ALA D  83    23.424  92.485  48.484  1.00 33.12        O
ATOM   10578  CB  ALA D  83    21.021  90.817  48.035  1.00 30.10        C
ATOM   10579  N   GLY D  84    24.338  90.550  49.144  1.00 31.41        N
ATOM   10580  CA  GLY D  84    25.340  91.216  49.968  1.00 30.11        C
ATOM   10581  C   GLY D  84    25.188  91.181  51.485  1.00 30.35        C
ATOM   10582  O   GLY D  84    26.037  91.740  52.198  1.00 30.63        O
ATOM   10583  N   LEU D  85    24.138  90.551  52.008  1.00 27.32        N
ATOM   10584  CA  LEU D  85    23.972  90.535  53.457  1.00 26.25        C
ATOM   10585  C   LEU D  85    25.066  89.624  54.011  1.00 25.83        C
ATOM   10586  O   LEU D  85    25.558  88.775  53.298  1.00 26.65        O
ATOM   10587  CB  LEU D  85    22.546  90.095  53.833  1.00 25.82        C
ATOM   10588  CG  LEU D  85    21.505  91.071  53.279  1.00 26.02        C
ATOM   10589  CD1 LEU D  85    20.124  90.816  53.867  1.00 25.12        C
ATOM   10590  CD2 LEU D  85    21.952  92.546  53.570  1.00 27.54        C
ATOM   10591  N   LYS D  86    25.485  89.799  55.262  1.00 26.59        N
ATOM   10592  CA  LYS D  86    26.582  88.978  55.793  1.00 26.58        C
ATOM   10593  C   LYS D  86    26.246  88.065  56.975  1.00 25.75        C
ATOM   10594  O   LYS D  86    27.130  87.556  57.661  1.00 23.18        O
ATOM   10595  CB  LYS D  86    27.770  89.870  56.143  1.00 29.92        C
ATOM   10596  CG  LYS D  86    28.323  90.584  54.893  1.00 32.10        C
ATOM   10597  CD  LYS D  86    29.818  90.797  54.969  1.00 35.43        C
ATOM   10598  CE  LYS D  86    30.295  91.528  53.697  1.00 37.93        C
ATOM   10599  NZ  LYS D  86    31.721  91.955  53.759  1.00 38.07        N
ATOM   10600  N   ALA D  87    24.954  87.859  57.186  1.00 25.85        N
ATOM   10601  CA  ALA D  87    24.486  86.968  58.247  1.00 24.99        C
ATOM   10602  C   ALA D  87    23.047  86.627  57.899  1.00 26.00        C
ATOM   10603  O   ALA D  87    22.384  87.340  57.125  1.00 26.52        O
ATOM   10604  CB  ALA D  87    24.545  87.666  59.590  1.00 24.58        C
ATOM   10605  N   ILE D  88    22.561  85.531  58.478  1.00 25.13        N
ATOM   10606  CA  ILE D  88    21.185  85.096  58.233  1.00 23.69        C
ATOM   10607  C   ILE D  88    20.474  85.028  59.579  1.00 20.88        C
ATOM   10608  O   ILE D  88    21.069  84.616  60.556  1.00 23.18        O
ATOM   10609  CB  ILE D  88    21.124  83.659  57.565  1.00 22.46        C
ATOM   10610  CG1 ILE D  88    21.711  83.686  56.158  1.00 23.66        C
ATOM   10611  CG2 ILE D  88    19.648  83.201  57.450  1.00 24.80        C
ATOM   10612  CD1 ILE D  88    23.088  83.121  56.080  1.00 25.43        C
ATOM   10613  N   TYR D  89    19.222  85.443  59.629  1.00 21.56        N
ATOM   10614  CA  TYR D  89    18.461  85.355  60.867  1.00 21.80        C
ATOM   10615  C   TYR D  89    17.434  84.235  60.656  1.00 20.91        C
ATOM   10616  O   TYR D  89    16.764  84.221  59.640  1.00 22.34        O
ATOM   10617  CB  TYR D  89    17.677  86.632  61.172  1.00 21.46        C
ATOM   10618  CG  TYR D  89    16.863  86.474  62.430  1.00 20.13        C
ATOM   10619  CD1 TYR D  89    17.485  86.250  63.652  1.00 22.03        C
ATOM   10620  CD2 TYR D  89    15.467  86.495  62.400  1.00 20.12        C
ATOM   10621  CE1 TYR D  89    16.724  86.054  64.823  1.00 20.87        C
ATOM   10622  CE2 TYR D  89    14.703  86.289  63.544  1.00 19.72        C
ATOM   10623  CZ  TYR D  89    15.334  86.073  64.749  1.00 21.54        C
ATOM   10624  OH  TYR D  89    14.551  85.904  65.880  1.00 26.36        O
ATOM   10625  N   LEU D  90    17.304  83.329  61.625  1.00 20.49        N
ATOM   10626  CA  LEU D  90    16.340  82.230  61.538  1.00 19.22        C
ATOM   10627  C   LEU D  90    15.288  82.444  62.646  1.00 19.95        C
ATOM   10628  O   LEU D  90    15.512  82.111  63.815  1.00 21.47        O
ATOM   10629  CB  LEU D  90    17.114  80.926  61.739  1.00 21.18        C
ATOM   10630  CG  LEU D  90    16.585  79.501  61.533  1.00 24.91        C
ATOM   10631  CD1 LEU D  90    15.109  79.498  61.420  1.00 20.12        C
ATOM   10632  CD2 LEU D  90    17.250  78.884  60.353  1.00 25.11        C
ATOM   10633  N   SER D  91    14.167  83.033  62.253  1.00 18.87        N
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| ATOM | 10634 | CA | SER D | 91 | 13.025 | 83.378 | 63.098 | 1.00 | 19.48 | C |
|------|-------|-----|-------|-----|--------|--------|--------|------|-------|---|
| ATOM | 10635 | C | SER D | 91 | 12.242 | 82.121 | 63.435 | 1.00 | 18.80 | C |
| ATOM | 10636 | O | SER D | 91 | 12.062 | 81.295 | 62.557 | 1.00 | 19.69 | O |
| ATOM | 10637 | CB | SER D | 91 | 12.113 | 84.313 | 62.296 | 1.00 | 18.01 | C |
| ATOM | 10638 | OG | SER D | 91 | 10.813 | 84.423 | 62.871 | 1.00 | 23.56 | O |
| ATOM | 10639 | N | GLY D | 92 | 11.793 | 82.005 | 64.682 | 1.00 | 18.56 | N |
| ATOM | 10640 | CA | GLY D | 92 | 10.993 | 80.864 | 65.115 | 1.00 | 19.07 | C |
| ATOM | 10641 | C | GLY D | 92 | 9.551 | 81.156 | 64.749 | 1.00 | 19.65 | C |
| ATOM | 10642 | O | GLY D | 92 | 8.732 | 80.238 | 64.517 | 1.00 | 20.98 | O |
| ATOM | 10643 | N | TRP D | 93 | 9.221 | 82.450 | 64.689 | 1.00 | 17.43 | N |
| ATOM | 10644 | CA | TRP D | 93 | 7.899 | 82.895 | 64.294 | 1.00 | 18.71 | C |
| ATOM | 10645 | C | TRP D | 93 | 7.652 | 82.354 | 62.872 | 1.00 | 17.63 | C |
| ATOM | 10646 | O | TRP D | 93 | 6.589 | 81.773 | 62.593 | 1.00 | 18.45 | O |
| ATOM | 10647 | CB | TRP D | 93 | 7.855 | 84.455 | 64.256 | 1.00 | 19.24 | C |
| ATOM | 10648 | CG | TRP D | 93 | 6.488 | 85.050 | 64.027 | 1.00 | 19.83 | C |
| ATOM | 10649 | CD1 | TRP D | 93 | 5.667 | 85.597 | 64.971 | 1.00 | 22.03 | C |
| ATOM | 10650 | CD2 | TRP D | 93 | 5.732 | ·85.036 | 62.803 | 1.00 | 21.00 | C |
| ATOM | 10651 | NE1 | TRP D | 93 | 4.446 | 85.908 | 64.416 | 1.00 | 21.72 | N |
| ATOM | 10652 | CE2 | TRP D | 93 | 4.462 | 85.575 | 63.091 | 1.00 | 20.74 | C |
| ATOM | 10653 | CE3 | TRP D | 93 | 6.005 | 84.607 | 61.495 | 1.00 | 20.95 · | C |
| ATOM | 10654 | CZ2 | TRP D | 93 | 3.462 | 85.696 | 62.120 | 1.00 | 23.36 | C |
| ATOM | 10655 | CZ3 | TRP D | 93 | 5.019 | 84.727 | 60.536 | 1.00 | 21.87 | C |
| ATOM | 10656 | CH2 | TRP D | 93 | 3.764 | 85.260 | 60.846 | 1.00 | 22.91 | C |
| ATOM | 10657 | N | GLN D | 94 | 8.616 | 82.555 | 61.970 | 1.00 | 16.26 | N |
| ATOM | 10658 | CA | GLN D | 94 | 8.441 | 82.097 | 60.593 | 1.00 | 17.18 | C |
| ATOM | 10659 | C | GLN D | 94 | 8.391 | 80.584 | 60.521 | 1.00 | 16.26 | C |
| ATOM | 10660 | O | GLN D | 94 | 7.649 | 80.020 | 59.707 | 1.00 | 16.40 | O |
| ATOM | 10661 | CB | GLN D | 94 | 9.551 | 82.616 | 59.673 | 1.00 | 19.53 | C |
| ATOM | 10662 | CG | GLN D | 94 | 9.575 | 84.149 | 59.618 | 1.00 | 21.18 | C |
| ATOM | 10663 | CD | GLN D | 94 | 10.559 | 84.706 | 58.625 | 1.00 | 19.75 | C |
| ATOM | 10664 | OE1 | GLN D | 94 | 11.669 | 84.193 | 58.455 | 1.00 | 22.66 | O |
| ATOM | 10665 | NE2 | GLN D | 94 | 10.165 | 85.788 | 57.964 | 1.00 | 22.13 | N |
| ATOM | 10666 | N | VAL D | 95 | 9.174 | 79.928 | 61.368 | 1.00 | 16.91 | N |
| ATOM | 10667 | CA | VAL D | 95 | 9.173 | 78.471 | 61.379 | 1.00 | 15.39 | C |
| ATOM | 10668 | C | VAL D | 95 | 7.776 | 78.022 | 61.794 | 1.00 | 15.25 | C |
| ATOM | 10669 | O | VAL D | 95 | 7.205 | 77.117 | 61.184 | 1.00 | 17.26 | O |
| ATOM | 10670 | CB | VAL D | 95 | 10.303 | 77.940 | 62.301 | 1.00 | 17.19 | C |
| ATOM | 10671 | CG1 | VAL D | 95 | 10.046 | 76.438 | 62.731 | 1.00 | 14.28 | C |
| ATOM | 10672 | CG2 | VAL D | 95 | 11.606 | 78.039 | 61.528 | 1.00 | 14.03 | C |
| ATOM | 10673 | N | ALA D | 96 | 7.205 | 78.679 | 62.799 | 1.00 | 16.00 | N |
| ATOM | 10674 | CA | ALA D | 96 | 5.848 | 78.355 | 63.248 | 1.00 | 17.58 | C |
| ATOM | 10675 | C | ALA D | 96 | 4.803 | 78.508 | 62.136 | 1.00 | 18.12 | C |
| ATOM | 10676 | O | ALA D | 96 | 3.951 | 77.651 | 61.931 | 1.00 | 19.30 | O |
| ATOM | 10677 | CB | ALA D | 96 | 5.458 | 79.271 | 64.422 | 1.00 | 16.94 | C |
| ATOM | 10678 | N | GLY D | 97 | 4.866 | 79.633 | 61.439 | 1.00 | 18.63 | N |
| ATOM | 10679 | CA | GLY D | 97 | 3.895 | 79.908 | 60.403 | 1.00 | 18.42 | C |
| ATOM | 10680 | C | GLY D | 97 | 4.071 | 79.217 | 59.074 | 1.00 | 18.63 | C |
| ATOM | 10681 | O | GLY D | 97 | 3.082 | 79.028 | 58.391 | 1.00 | 19.41 | O |
| ATOM | 10682 | N | ASP D | 98 | 5.270 | 78.783 | 58.703 | 1.00 | 17.21 | N |
| ATOM | 10683 | CA | ASP D | 98 | 5.368 | 78.171 | 57.371 | 1.00 | 17.87 | C |
| ATOM | 10684 | C | ASP D | 98 | 6.518 | 77.188 | 57.142 | 1.00 | 15.99 | C |
| ATOM | 10685 | O | ASP D | 98 | 6.754 | 76.800 | 55.990 | 1.00 | 16.95 | O |
| ATOM | 10686 | CB | ASP D | 98 | 5.450 | 79.317 | 56.332 | 1.00 | 18.44 | C |
| ATOM | 10687 | CG | ASP D | 98 | 4.979 | 78.921 | 54.926 | 1.00 | 19.62 | C |
| ATOM | 10688 | OD1 | ASP D | 98 | 4.093 | 78.043 | 54.803 | 1.00 | 19.98 | O |
| ATOM | 10689 | OD2 | ASP D | 98 | 5.483 | 79.528 | 53.942 | 1.00 | 18.57 | O |
| ATOM | 10690 | N | ALA D | 99 | 7.230 | 76.767 | 58.204 | 1.00 | 16.94 | N |
| ATOM | 10691 | CA | ALA D | 99 | 8.353 | 75.851 | 58.015 | 1.00 | 15.80 | C |
| ATOM | 10692 | C | ALA D | 99 | 8.717 | 75.003 | 59.218 | 1.00 | 14.78 | C |
| ATOM | 10693 | O | ALA D | 99 | 9.881 | 74.936 | 59.591 | 1.00 | 14.76 | O |
| ATOM | 10694 | CB | ALA D | 99 | 9.621 | 76.640 | 57.527 | 1.00 | 14.53 | C |
| ATOM | 10695 | N | ASN D | 100 | 7.737 | 74.357 | 59.847 | 1.00 | 13.26 | N |
| ATOM | 10696 | CA | ASN D | 100 | 8.073 | 73.524 | 61.011 | 1.00 | 13.93 | C |
| ATOM | 10697 | C | ASN D | 100 | 7.705 | 72.059 | 60.749 | 1.00 | 15.76 | C |
| ATOM | 10698 | O | ASN D | 100 | 6.913 | 71.762 | 59.817 | 1.00 | 14.10 | O |
| ATOM | 10699 | CB | ASN D | 100 | 7.395 | 74.038 | 62.296 | 1.00 | 14.12 | C |
| ATOM | 10700 | CG | ASN D | 100 | 5.876 | 73.889 | 62.274 | 1.00 | 15.58 | C |
| ATOM | 10701 | OD1 | ASN D | 100 | 5.132 | 74.852 | 61.949 | 1.00 | 18.42 | O |
| ATOM | 10702 | ND2 | ASN D | 100 | 5.402 | 72.712 | 62.622 | 1.00 | 11.58 | N |
| ATOM | 10703 | N | LEU D | 101 | 8.247 | 71.160 | 61.577 | 1.00 | 14.43 | N |
| ATOM | 10704 | CA | LEU D | 101 | 8.069 | 69.721 | 61.382 | 1.00 | 14.43 | C |
| ATOM | 10705 | C | LEU D | 101 | 6.706 | 69.070 | 61.619 | 1.00 | 12.52 | C |
| ATOM | 10706 | O | LEU D | 101 | 6.548 | 67.885 | 61.279 | 1.00 | 12.16 | O |
| ATOM | 10707 | CB | LEU D | 101 | 9.138 | 68:974 | 62.197 | 1.00 | 12.27 | C |
| ATOM | 10708 | CG | LEU D | 101 | 10.526 | 69.406 | 61.713 | 1.00 | 13.98 | C |
| ATOM | 10709 | CD1 | LEU D | 101 | 11.589 | 68.838 | 62.660 | 1.00 | 10.88 | C |
| ATOM | 10710 | CD2 | LEU D | 101 | 10.777 | 68.950 | 60.285 | 1.00 | 15.53 | C |
| ATOM | 10711 | N | SER D | 102 | 5.731 | 69.822 | 62.147 | 1.00 | 13.14 | N |
| ATOM | 10712 | CA | SER D | 102 | 4.364 | 69.318 | 62.355 | 1.00 | 14.10 | C |
| ATOM | 10713 | C | SER D | 102 | 3.606 | 69.422 | 61.005 | 1.00 | 15.24 | C |

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ATOM   10714  O    SER D 102      2.592  68.753  60.780  1.00 13.77           O
ATOM   10715  CB   SER D 102      3.610  70.193  63.389  1.00 16.04           C
ATOM   10716  OG   SER D 102      3.236  71.459  62.798  1.00 16.77           O
ATOM   10717  N    GLY D 103      4.108  70.275  60.128  1.00 14.00           N
ATOM   10718  CA   GLY D 103      3.483  70.518  58.843  1.00 15.11           C
ATOM   10719  C    GLY D 103      2.340  71.525  58.998  1.00 13.58          ·C
ATOM   10720  O    GLY D 103      1.745  71.934  58.006  1.00 16.66           O
ATOM   10721  N    HIS D 104      2.036  71.937  60.227  1.00 16.75           N
ATOM   10722  CA   HIS D 104      0.914  72.874  60.461  1.00 15.50           C
ATOM   10723  C    HIS D 104      1.311  74.352  60.467  1.00 16.87           C
ATOM   10724  O    HIS D 104      2.486  74.711  60.642  1.00 15.14           O
ATOM   10725  CB   HIS D 104      0.203  72.526  61.783  1.00 15.00           C
ATOM   10726  CG   HIS D 104     -0.675  71.300  61.697  1.00 17.95           C
ATOM   10727  ND1  HIS D 104     -1.749  71.203  60.835  1.00 18.73           N
ATOM   10728  CD2  HIS D 104     -0.601  70.104  62.330  1.00 17.76           C
ATOM   10729  CE1  HIS D 104     -2.295  70.002  60.938  1.00 18.56           C
ATOM   10730  NE2  HIS D 104     -1.613  69.309  61.837  1.00 20.87           N
ATOM   10731  N    THR D 105      0.317  75.215  60.258  1.00 15.63           N
ATOM   10732  CA   THR D 105      0.559  76.656  60.330  1.00 17.89           C
ATOM   10733  C    THR D 105      0.230  77.082  61.785  1.00 17.29           C
ATOM   10734  O    THR D 105     -0.855  76.769  62.320  1.00 18.18           O
ATOM   10735  CB   THR D 105     -0.351  77.454  59.333  1.00 17.57           C
ATOM   10736  OG1  THR D 105      0.102  77.234  57.988  1.00 20.05           O
ATOM   10737  CG2  THR D 105     -0.234  78.974  59.604  1.00 18.97           C
ATOM   10738  N    TYR D 106      1.170  77.741  62.453  1.00 16.14           N
ATOM   10739  CA   TYR D 106      0.932  78.133  63.832  1.00 17.79           C
ATOM   10740  C    TYR D 106      1.313  79.540  64.204  1.00 17.59           C
ATOM   10741  O    TYR D 106      2.215  80.143  63.609  1.00 18.93           O
ATOM   10742  CB   TYR D 106      1.734  77.297  64.835  1.00 16.85           C
ATOM   10743  CG   TYR D 106      1.434  75.847  64.926  1.00 18.35           C
ATOM   10744  CD1  TYR D 106      0.139  75.381  65.193  1.00 16.21           C
ATOM   10745  CD2  TYR D 106      2.476  74.923  64.844  1.00 16.39           C
ATOM   10746  CE1  TYR D 106     -0.102  74.011  65.388  1.00 18.38           C
ATOM   10747  CE2  TYR D 106      2.251  73.580  65.035  1.00 17.57           C
ATOM   10748  CZ   TYR D 106      0.964  73.121  65.311  1.00 16.57           C
ATOM   10749  OH   TYR D 106      0.785  71.774  65.531  1.00 15.82           O
ATOM   10750  N    PRO D 107      0.612  80.064  65.225  1.00 18.33           N
ATOM   10751  CA   PRO D 107      0.834  81.392  65.785  1.00 18.22           C
ATOM   10752  C    PRO D 107      2.141  81.159  66.566  1.00 19.27           C
ATOM   10753  O    PRO D 107      2.519  79.998  66.848  1.00 18.53           O
ATOM   10754  CB   PRO D 107     -0.391  81.615  66.687  1.00 16.78           C
ATOM   10755  CG   PRO D 107     -0.986  80.273  66.931  1.00 19.60           C
ATOM   10756  CD   PRO D 107     -0.694  79.510  65.652  1.00 16.67           C
ATOM   10757  N    ASP D 108      2.801  82.236  66.934  1.00 19.01           N
ATOM   10758  CA   ASP D 108      4.088  82.190  67.595  1.00 20.69           C
ATOM   10759  C    ASP D 108      3.957  81.940  69.097  1.00 20.40           C
ATOM   10760  O    ASP D 108      4.032  82.857  69.922  1.00 20.10           O
ATOM   10761  CB   ASP D 108      4.795  83.505  67.267  1.00 22.87           C
ATOM   10762  CG   ASP D 108      6.272  83.464  67.549  1.00 24.50           C
ATOM   10763  OD1  ASP D 108      6.838  82.347  67.582  1.00 27.83           O
ATOM   10764  OD2  ASP D 108      6.874  84.549  67.718  1.00 25.82           O
ATOM   10765  N    GLN D 109      3.739  80.672  69.453  1.00 19.51           N
ATOM   10766  CA   GLN D 109      3.546  80.299  70.835  1.00 19.68           C
ATOM   10767  C    GLN D 109      4.255  79.009  71.228  1.00 19.12           C
ATOM   10768  O    GLN D 109      3.779  78.280  72.098  1.00 19.82           O
ATOM   10769  CB   GLN D 109      2.050  80.169  71.100  1.00 21.32           C
ATOM   10770  CG   GLN D 109      1.271  81.533  70.872  1.00 21.04           C
ATOM   10771  CD   GLN D 109     -0.215  81.445  71.281  1.00 22.80           C
ATOM   10772  OE1  GLN D 109     -0.541  81.245  72.454  1.00 26.34           O
ATOM   10773  NE2  GLN D 109     -1.110  81.576  70.308  1.00 23.27           N
ATOM   10774  N    SER D 110      5.369  78.740  70.568  1.00 19.39           N
ATOM   10775  CA   SER D 110      6.146  77.530  70.837  1.00 19.13           C
ATOM   10776  C    SER D 110      5.292  76.299  70.688  1.00 16.84           C
ATOM   10777  O    SER D 110      5.348  75.429  71.541  1.00 18.15           O
ATOM   10778  CB   SER D 110      6.710  77.549  72.254  1.00 20.12           C
ATOM   10779  OG   SER D 110      7.826  78.424  72.297  1.00 24.25           O
ATOM   10780  N    LEU D 111      4.505  76.215  69.618  1.00 17.41           N
ATOM   10781  CA   LEU D 111      3.638  75.035  69.434  1.00 16.30           C
ATOM   10782  C    LEU D 111      4.252  73.927  68.578  1.00 14.74           C
ATOM   10783  O    LEU D 111      3.813  72.784  68.684  1.00 16.64           O
ATOM   10784  CB   LEU D 111      2.271  75.449  68.792  1.00 16.99           C
ATOM   10785  CG   LEU D 111      1.289  76.291  69.650  1.00 17.91           C
ATOM   10786  CD1  LEU D 111      0.106  76.766  68.821  1.00 18.12           C
ATOM   10787  CD2  LEU D 111      0.747  75.474  70.798  1.00 20.26           C
ATOM   10788  N    TYR D 112      5.255  74.245  67.761  1.00 13.33           N
ATOM   10789  CA   TYR D 112      5.852  73.283  66.820  1.00 12.64           C
ATOM   10790  C    TYR D 112      6.917  72.391  67.498  1.00 12.62           C
ATOM   10791  O    TYR D 112      7.325  72.698  68.629  1.00 12.79           O
ATOM   10792  CB   TYR D 112      6.435  74.050  65.616  1.00 10.84           C
ATOM   10793  CG   TYR D 112      7.512  75.064  65.983  1.00 15.38           C
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| ATOM | 10794 | CD1 | TYR | D | 112 | 8.800 | 74.652 | 66.272 | 1.00 | 14.04 | C |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 10795 | CD2 | TYR | D | 112 | 7.237 | 76.466 | 66.000 | 1.00 | 17.00 | C |
| ATOM | 10796 | CE1 | TYR | D | 112 | 9.822 | 75.573 | 66.579 | 1.00 | 14.71 | C |
| ATOM | 10797 | CE2 | TYR | D | 112 | 8.248 | 77.390 | 66.285 | 1.00 | 15.86 | C |
| ATOM | 10798 | CZ | TYR | D | 112 | 9.543 | 76.938 | 66.583 | 1.00 | 16.99 | C |
| ATOM | 10799 | OH | TYR | D | 112 | 10.558 | 77.811 | 66.933 | 1.00 | 16.31 | O |
| ATOM | 10800 | N | PRO | D | 113 | 7.318 | 71.267 | 66.852 | 1.00 | 11.55 | N |
| ATOM | 10801 | CA | PRO | D | 113 | 8.325 | 70.351 | 67.436 | 1.00 | 13.05 | C |
| ATOM | 10802 | C | PRO | D | 113 | 9.669 | 71.044 | 67.650 | 1.00 | 12.93 | C |
| ATOM | 10803 | O | PRO | D | 113 | 10.146 | 71.755 | 66.761 | 1.00 | 12.47 | O |
| ATOM | 10804 | CB | PRO | D | 113 | 8.406 | 69.216 | 66.427 | 1.00 | 12.96 | C |
| ATOM | 10805 | CG | PRO | D | 113 | 7.005 | 69.194 | 65.801 | 1.00 | 11.80 | C |
| ATOM | 10806 | CD | PRO | D | 113 | 6.790 | 70.712 | 65.585 | 1.00 | 13.06 | C |
| ATOM | 10807 | N | ALA | D | 114 | 10.259 | 70.799 | 68.827 | 1.00 | 15.11 | N |
| ATOM | 10808 | CA | ALA | D | 114 | 11.494 | 71.437 | 69.259 | 1.00 | 14.61 | C |
| ATOM | 10809 | C | ALA | D | 114 | 12.679 | 71.316 | 68.358 | 1.00 | 15.59 | C |
| ATOM | 10810 | O | ALA | D | 114 | 13.612 | 72.116 | 68.493 | 1.00 | 15.64 | O |
| ATOM | 10811 | CB | ALA | D | 114 | 11.885 | 70.947 | 70.645 | 1.00 | 15.70 | C |
| ATOM | 10812 | N | ASN | D | 115 | 12.686 | 70.338 | 67.453 | 1.00 | 13.87 | N |
| ATOM | 10813 | CA | ASN | D | 115 | 13.819 | 70.198 | 66.542 | 1.00 | 12.61 | C |
| ATOM | 10814 | C | ASN | D | 115 | 13.584 | 70.898 | 65.192 | 1.00 | 11.00 | C |
| ATOM | 10815 | O | ASN | D | 115 | 14.325 | 70.693 | 64.251 | 1.00·13.74 | | O |
| ATOM | 10816 | CB | ASN | D | 115 | 14.184 | 68.679 | 66.378 | 1.00 | 13.24 | C |
| ATOM | 10817 | CG | ASN | D | 115 | 13.071 | 67.864 | 65.770 | 1.00 | 16.59 | C |
| ATOM | 10818 | OD1 | ASN | D | 115 | 11.868 | 68.178 | 65.936 | 1.00 | 10.45 | O |
| ATOM | 10819 | ND2 | ASN | D | 115 | 13.450 | 66.784 | 65.081 | 1.00 | 11.32 | N |
| ATOM | 10820 | N | SER | D | 116 | 12.537 | 71.737 | 65.095 | 1.00 | 11.71 | N |
| ATOM | 10821 | CA | SER | D | 116 | 12.238 | 72.398 | 63.834 | 1.00 | 11.20 | C |
| ATOM | 10822 | C | SER | D | 116 | 13.275 | 73.432 | 63.423 | 1.00 | 12.02 | C |
| ATOM | 10823 | O | SER | D | 116 | 13.687 | 73.491 | 62.262 | 1.00 | 12.62 | O |
| ATOM | 10824 | CB | SER | D | 116 | 10.871 | 73.087 | 63.877 | 1.00 | 9.19 | C |
| ATOM | 10825 | OG | SER | D | 116 | 9.806 | 72.083 | 63.975 | 1.00 | 9.71 | O |
| ATOM | 10826 | N | VAL | D | 117 | 13.658 | 74.278 | 64.363 | 1.00 | 12.06 | N |
| ATOM | 10827 | CA | VAL | D | 117 | 14.624 | 75.307 | 63.985 | 1.00 | 13.08 | C |
| ATOM | 10828 | C | VAL | D | 117 | 15.948 | 74.658 | 63.630 | 1.00 | 11.98 | C |
| ATOM | 10829 | O | VAL | D | 117 | 16.555 | 75.012 | 62.652 | 1.00 | 13.07 | O |
| ATOM | 10830 | CB | VAL | D | 117 | 14.782 | 76.428 | 65.064 | 1.00 | 11.96 | C |
| ATOM | 10831 | CG1 | VAL | D | 117 | 15.948 | 77.385 | 64.658 | 1.00 | 12.00 | C |
| ATOM | 10832 | CG2 | VAL | D | 117 | 13.533 | 77.272 | 65.112 | 1.00 | 12.72 | C |
| ATOM | 10833 | N | PRO | D | 118 | 16.403 | 73.641 | 64.398 | 1.00 | 14.73 | N |
| ATOM | 10834 | CA | PRO | D | 118 | 17.678 | 73.026 | 63.973 | 1.00 | 14.65 | C |
| ATOM | 10835 | C | PRO | D | 118 | 17.608 | 72.483 | 62.529 | 1.00 | 15.57 | C |
| ATOM | 10836 | O | PRO | D | 118 | 18.551 | 72.584 | 61.735 | 1.00 | 15.23 | O |
| ATOM | 10837. | CB | PRO | D | 118 | 17.881 | 71.910 | 64.993 | 1.00 | 16.19 | C |
| ATOM | 10838 | CG | PRO | D | 118 | 17.313 | 72.491 | 66.239 | 1.00 | 16.07 | C |
| ATOM | 10839 | CD | PRO | D | 118 | 16.055 | 73.260 | 65.779 | 1.00 | 14.15 | C |
| ATOM | 10840 | N | GLN | D | 119 | 16.479 | 71.867 | 62.169 | 1.00 | 15.31 | N |
| ATOM | 10841 | CA | GLN | D | 119 | 16.365 | 71.361 | 60.808 | 1.00 | 15.46 | C |
| ATOM | 10842 | C | GLN | D | 119 | 16.475 | 72.498 | 59.793 | 1.00 | 14.52 | C |
| ATOM | 10843 | O | GLN | D | 119 | 17.012 | 72.299 | 58.717 | 1.00 | 15.84 | O |
| ATOM | 10844 | CB | GLN | D | 119 | 15.031 | 70.647 | 60.599 | 1.00 | 17.92 | C |
| ATOM | 10845 | CG | GLN | D | 119 | 14.971 | 69.209 | 61.127 | 1.00 | 23.31 | C |
| ATOM | 10846 | CD | GLN | D | 119 | 16.123 | 68.353 | 60.596 | 1.00 | 27.35 | C |
| ATOM | 10847 | OE1 | GLN | D | 119 | 17.198 | 68.266 | 61.227 | 1.00 | 30.27 | O |
| ATOM | 10848 | NE2 | GLN | D | 119 | 15.927 | 67.753 | 59.417 | 1.00 | 28.19 | N |
| ATOM | 10849 | N | VAL | D | 120 | 15.950 | 73.680 | 60.119 | 1.00 | 15.08 | N |
| ATOM | 10850 | CA | VAL | D | 120 | 16.014 | 74.799 | 59.179 | 1.00 | 15.61 | C |
| ATOM | 10851 | C | VAL | D | 120 | 17.438 | 75.341 | 59.138 | 1.00 | 14.17 | C |
| ATOM | 10852 | O | VAL | D | 120 | 17.904 | 75.786 | 58.076 | 1.00 | 16.28 | O |
| ATOM | 10853 | CB | VAL | D | 120 | 14.957 | 75.912 | 59.493 | 1.00 | 15.83 | C |
| ATOM | 10854 | CG1 | VAL | D | 120 | 15.069 | 77.028 | 58.448 | 1.00 | 20.70 | C |
| ATOM | 10855 | CG2 | VAL | D | 120 | 13.522 | 75.322 | 59.346 | 1.00 | 16.90 | C |
| ATOM | 10856 | N | VAL | D | 121 | 18.142 | 75.292 | 60.261 | 1.00 | 15.60 | N |
| ATOM | 10857 | CA | VAL | D | 121 | 19.521 | 75.706 | 60.233 | 1.00 | 15.97 | C |
| ATOM | 10858 | C | VAL | D | 121 | 20.276 | 74.766 | 59.292 | 1.00 | 15.05 | C |
| ATOM | 10859 | O | VAL | D | 121 | 21.059 | 75.237 | 58.460 | 1.00 | 17.77 | O |
| ATOM | 10860 | CB | VAL | D | 121 | 20.182 | 75.638 | 61.629 | 1.00 | 17.54 | C |
| ATOM | 10861 | CG1 | VAL | D | 121 | 21.686 | 75.846 | 61.494 | 1.00 | 14.69 | C |
| ATOM | 10862 | CG2 | VAL | D | 121 | 19.570 | 76.700 | 62.545 | 1.00 | 14.46 | C |
| ATOM | 10863 | N | ARG | D | 122 | 20.067 | 73.438 | 59.408 | 1.00 | 14.81 | N |
| ATOM | 10864 | CA | ARG | D | 122 | 20.787 | 72.514 | 58.536 | 1.00 | 13.43 | C |
| ATOM | 10865 | C | ARG | D | 122 | 20.392 | 72.795 | 57.091 | 1.00 | 12.70 | C |
| ATOM | 10866 | O | ARG | D | 122 | 21.232 | 72.737 | 56.189 | 1.00 | 15.95 | O |
| ATOM | 10867 | CB | ARG | D | 122 | 20.482 | 71.028 | 58.895 | 1.00 | 13.42 | C |
| ATOM | 10868 | CG | ARG | D | 122 | 21.284 | 70.003 | 58.096 | 1.00 | 14.99 | C |
| ATOM | 10869 | CD | ARG | D | 122 | 22.745 | 70.079 | 58.464 | 1.00 | 17.61 | C |
| ATOM | 10870 | NE | ARG | D | 122 | 23.492 | 70.772 | 57.406 | 1.00 | 16.74 | N |
| ATOM | 10871 | CZ | ARG | D | 122 | 24.815 | 70.715 | 57.280 | 1.00 | 19.83 | C |
| ATOM | 10872 | NH1 | ARG | D | 122 | 25.532 | 70.021 | 58.153 | 1.00 | 21.63 | N |
| ATOM | 10873 | NH2 | ARG | D | 122 | 25.418 | 71.292 | 56.241 | 1.00 | 21.40 | N |

| ATOM | 10874 | N | ARG | D | 123 | 19.115 | 73.100 | 56.859 | 1.00 | 15.52 | N |
| ATOM | 10875 | CA | ARG | D | 123 | 18.640 | 73.391 | 55.505 | 1.00 | 14.49 | C |
| ATOM | 10876 | C | ARG | D | 123 | 19.349 | 74.609 | 54.909 | 1.00 | 16.08 | C |
| ATOM | 10877 | O | ARG | D | 123 | 19.838 | 74.544 | 53.809 | 1.00 | 17.82 | O |
| ATOM | 10878 | CB | ARG | D | 123 | 17.131 | 73.650 | 55.502 | 1.00 | 16.60 | C |
| ATOM | 10879 | CG | ARG | D | 123 | 16.595 | 74.214 | 54.164 | 1.00 | 12.25 | C |
| ATOM | 10880 | CD | ARG | D | 123 | 17.027 | 73.385 | 52.943 | 1.00 | 15.43 | C |
| ATOM | 10881 | NE | ARG | D | 123 | 16.758 | 74.157 | 51.713 | 1.00 | 18.85 | N |
| ATOM | 10882 | CZ | ARG | D | 123 | 17.440 | 74.021 | 50.581 | 1.00 | 18.63 | C |
| ATOM | 10883 | NH1 | ARG | D | 123 | 18.429 | 73.141 | 50.513 | 1.00 | 15.55 | N |
| ATOM | 10884 | NH2 | ARG | D | 123 | 17.126 | 74.752 | 49.514 | 1.00 | 19.18 | N |
| ATOM | 10885 | N | ILE | D | 124 | 19.332 | 75.720 | 55.636 | 1.00 | 18.58 | N |
| ATOM | 10886 | CA | ILE | D | 124 | 19.994 | 76.940 | 55.191 | 1.00 | 18.50 | C |
| ATOM | 10887 | C | ILE | D | 124 | 21.459 | 76.632 | 54.911 | 1.00 | 17.88 | C |
| ATOM | 10888 | O | ILE | D | 124 | 21.955 | 76.969 | 53.840 | 1.00 | 18.70 | O |
| ATOM | 10889 | CB | ILE | D | 124 | 19.876 | 78.062 | 56.247 | 1.00 | 18.13 | C |
| ATOM | 10890 | CG1 | ILE | D | 124 | 18.451 | 78.587 | 56.226 | 1.00 | 19.58 | C |
| ATOM | 10891 | CG2 | ILE | D | 124 | 20.885 | 79.197 | 55.941 | 1.00 | 19.97 | C |
| ATOM | 10892 | CD1 | ILE | D | 124 | 18.052 | 79.458 | 57.376 | 1.00 | 19.68 | C |
| ATOM | 10893 | N | ASN | D | 125 | 22.153 | 75.992 | 55.837 | 1.00 | 19.50 | N |
| ATOM | 10894 | CA | ASN | D | 125 | 23.557 | 75.652 | 55.587 | 1.00 | 18.65 | C |
| ATOM | 10895 | C | ASN | D | 125 | 23.758 | 74.798 | 54.340 | 1.00 | 20.09 | C |
| ATOM | 10896 | O | ASN | D | 125 | 24.702 | 75.020 | 53.579 | 1.00 | 20.95 | O |
| ATOM | 10897 | CB | ASN | D | 125 | 24.207 | 74.951 | 56.780 | 1.00 | 19.19 | C |
| ATOM | 10898 | CG | ASN | D | 125 | 24.819 | 75.926 | 57.769 | 1.00 | 18.91 | C |
| ATOM | 10899 | OD1 | ASN | D | 125 | 25.409 | 76.966 | 57.373 | 1.00 | 20.42 | O |
| ATOM | 10900 | ND2 | ASN | D | 125 | 24.703 | 75.613 | 59.048 | 1.00 | 17.37 | N |
| ATOM | 10901 | N | ASN | D | 126 | 22.879 | 73.821 | 54.107 | 1.00 | 17.91 | N |
| ATOM | 10902 | CA | ASN | D | 126 | 23.041 | 72.994 | 52.917 | 1.00 | 17.57 | C |
| ATOM | 10903 | C | ASN | D | 126 | 22.824 | 73.829 | 51.675 | 1.00 | 16.85 | C |
| ATOM | 10904 | O | ASN | D | 126 | 23.475 | 73.583 | 50.666 | 1.00 | 20.12 | O |
| ATOM | 10905 | CB | ASN | D | 126 | 22.031 | 71.820 | 52.850 | 1.00 | 16.43 | C |
| ATOM | 10906 | CG | ASN | D | 126 | 22.237 | 70.803 | 53.915 | 1.00 | 16.51 | C |
| ATOM | 10907 | OD1 | ASN | D | 126 | 23.350 | 70.575 | 54.385 | 1.00 | 17.60 | O |
| ATOM | 10908 | ND2 | ASN | D | 126 | 21.126 | 70.123 | 54.311 | 1.00 | 17.69 | N |
| ATOM | 10909 | N | ALA | D | 127 | 21.898 | 74.780 | 51.730 | 1.00 | 16.80 | N |
| ATOM | 10910 | CA | ALA | D | 127 | 21.609 | 75.612 | 50.557 | 1.00 | 17.14 | C |
| ATOM | 10911 | C | ALA | D | 127 | 22.807 | 76.519 | 50.292 | 1.00 | 19.42 | C |
| ATOM | 10912 | O | ALA | D | 127 | 23.260 | 76.677 | 49.147 | 1.00 | 20.11 | O |
| ATOM | 10913 | CB | ALA | D | 127 | 20.354 | 76.462 | 50.785 | 1.00 | 14.29 | C |
| ATOM | 10914 | N | LEU | D | 128 | 23.331 | 77.104 | 51.357 | 1.00 | 21.54 | N |
| ATOM | 10915 | CA | LEU | D | 128 | 24.492 | 77.964 | 51.192 | 1.00 | 22.59 | C |
| ATOM | 10916 | C | LEU | D | 128 | 25.663 | 77.120 | 50.658 | 1.00 | 21.66 | C |
| ATOM | 10917 | O | LEU | D | 128 | 26.418 | 77.560 | 49.784 | 1.00 | 23.99 | O |
| ATOM | 10918 | CB | LEU | D | 128 | 24.852 | 78.647 | 52.530 | 1.00 | 22.90 | C |
| ATOM | 10919 | CG | LEU | D | 128 | 23.808 | 79.645 | 53.080 | 1.00 | 24.55 | C |
| ATOM | 10920 | CD1 | LEU | D | 128 | 24.307 | 80.208 | 54.424 | 1.00 | 24.72 | C |
| ATOM | 10921 | CD2 | LEU | D | 128 | 23.536 | 80.791 | 52.108 | 1.00 | 23.26 | C |
| ATOM | 10922 | N | GLN | D | 129 | 25.828 | 75.904 | 51.160 | 1.00 | 20.94 | N |
| ATOM | 10923 | CA | GLN | D | 129 | 26.927 | 75.090 | 50.677 | 1.00 | 19.96 | C |
| ATOM | 10924 | C | GLN | D | 129 | 26.754 | 74.763 | 49.208 | 1.00 | 21.98 | C |
| ATOM | 10925 | O | GLN | D | 129 | 27.753 | 74.573 | 48.497 | 1.00 | 22.35 | O |
| ATOM | 10926 | CB | GLN | D | 129 | 27.079 | 73.772 | 51.447 | 1.00 | 20.38 | C |
| ATOM | 10927 | CG | GLN | D | 129 | 27.646 | 73.878 | 52.864 | 1.00 | 21.51 | C |
| ATOM | 10928 | CD | GLN | D | 129 | 27.634 | 72.552 | 53.572 | 1.00 | 24.48 | C |
| ATOM | 10929 | OE1 | GLN | D | 129 | 26.559 | 71.984 | 53.837 | 1.00 | 24.57 | O |
| ATOM | 10930 | NE2 | GLN | D | 129 | 28.815 | 72.030 | 53.879 | 1.00 | 22.13 | N |
| ATOM | 10931 | N | ARG | D | 130 | 25.508 | 74.667 | 48.738 | 1.00 | 21.18 | N |
| ATOM | 10932 | CA | ARG | D | 130 | 25.323 | 74.368 | 47.331 | 1.00 | 21.44 | C |
| ATOM | 10933 | C | ARG | D | 130 | 25.695 | 75.631 | 46.537 | 1.00 | 20.63 | C |
| ATOM | 10934 | O | ARG | D | 130 | 26.376 | 75.521 | 45.521 | 1.00 | 23.35 | O |
| ATOM | 10935 | CB | ARG | D | 130 | 23.868 | 73.960 | 47.023 | 1.00 | 20.11 | C |
| ATOM | 10936 | CG | ARG | D | 130 | 23.654 | 73.533 | 45.545 | 1.00 | 19.79 | C |
| ATOM | 10937 | CD | ARG | D | 130 | 24.281 | 72.168 | 45.249 | 1.00 | 19.14 | C |
| ATOM | 10938 | NE | ARG | D | 130 | 23.460 | 71.044 | 45.775 | 1.00 | 19.31 | N |
| ATOM | 10939 | CZ | ARG | D | 130 | 23.934 | 69.911 | 46.288 | 1.00 | 19.08 | C |
| ATOM | 10940 | NH1 | ARG | D | 130 | 25.236 | 69.699 | 46.383 | 1.00 | 18.96 | N |
| ATOM | 10941 | NH2 | ARG | D | 130 | 23.091 | 68.952 | 46.711 | 1.00 | 19.42 | N |
| ATOM | 10942 | N | ALA | D | 131 | 25.249 | 76.815 | 46.978 | 1.00 | 21.42 | N |
| ATOM | 10943 | CA | ALA | D | 131 | 25.578 | 78.040 | 46.224 | 1.00 | 22.17 | C |
| ATOM | 10944 | C | ALA | D | 131 | 27.080 | 78.244 | 46.160 | 1.00 | 21.52 | C |
| ATOM | 10945 | O | ALA | D | 131 | 27.596 | 78.793 | 45.177 | 1.00 | 22.65 | O |
| ATOM | 10946 | CB | ALA | D | 131 | 24.897 | 79.280 | 46.817 | 1.00 | 21.56 | C |
| ATOM | 10947 | N | ASP | D | 132 | 27.776 | 77.757 | 47.184 | 1.00 | 23.07 | N |
| ATOM | 10948 | CA | ASP | D | 132 | 29.237 | 77.874 | 47.288 | 1.00 | 23.83 | C |
| ATOM | 10949 | C | ASP | D | 132 | 29.894 | 76.889 | 46.338 | 1.00 | 24.33 | C |
| ATOM | 10950 | O | ASP | D | 132 | 30.850 | 77.229 | 45.647 | 1.00 | 24.32 | O |
| ATOM | 10951 | CB | ASP | D | 132 | 29.671 | 77.619 | 48.734 | 1.00 | 25.89 | C |
| ATOM | 10952 | CG | ASP | D | 132 | 31.187 | 77.610 | 48.914 | 1.00 | 28.37 | C |
| ATOM | 10953 | OD1 | ASP | D | 132 | 31.857 | 78.645 | 48.669 | 1.00 | 30.76 | O |

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ATOM   10954   OD2 ASP D 132    31.719  76.567  49.328  1.00 29.10        O
ATOM   10955   N   GLN D 133    29.364  75.668  46.268  1.00 24.08        N
ATOM   10956   CA  GLN D 133    29.908  74.651  45.374  1.00 23.43        C
ATOM   10957   C   GLN D 133    29.732  75.058  43.898  1.00 23.04        C
ATOM   10958   O   GLN D 133    30.594  74.768  43.065  1.00 25.01        O
ATOM   10959   CB  GLN D 133    29.207  73.296  45.608  1.00 21.60        C
ATOM   10960   CG  GLN D 133    29.654  72.531  46.838  1.00 21.16        C
ATOM   10961   CD  GLN D 133    28.527  71.674  47.443  1.00 24.46        C
ATOM   10962   OE1 GLN D 133    28.655  71.168  48.569  1.00 27.23        O
ATOM   10963   NE2 GLN D 133    27.432  71.523  46.712  1.00 17.27        N
ATOM   10964   N   ILE D 134    28.613  75.713  43.595  1.00 24.97        N
ATOM   10965   CA  ILE D 134    28.294  76.169  42.252  1.00 24.56        C
ATOM   10966   C   ILE D 134    29.196  77.343  41.884  1.00 26.38        C
ATOM   10967   O   ILE D 134    29.782  77.353  40.795  1.00 25.84        O
ATOM   10968   CB  ILE D 134    26.815  76.628  42.160  1.00 25.75        C
ATOM   10969   CG1 ILE D 134    25.886  75.414  42.295  1.00 21.93        C
ATOM   10970   CG2 ILE D 134    26.560  77.408  40.847  1.00 24.49        C
ATOM   10971   CD1 ILE D 134    24.386  75.781  42.261  1.00 22.06        C
ATOM   10972   N   ALA D 135    29.300  78.321  42.786  1.00 25.44        N
ATOM   10973   CA  ALA D 135    30.134  79.500  42.497  1.00 28.02        C
ATOM   10974   C   ALA D 135    31.548  79.061  42.184  1.00 28.43        C
ATOM   10975   O   ALA D 135    32.216  79.695  41.359  1.00 31.32        O
ATOM   10976   CB  ALA D 135    30.149  80.455  43.672  1.00 27.48        C
ATOM   10977   N   LYS D 136    32.002  77.987  42.822  1.00 28.46        N
ATOM   10978   CA  LYS D 136    33.352  77.518  42.583  1.00 30.04        C
ATOM   10979   C   LYS D 136    33.505  77.033  41.174  1.00 31.86        C
ATOM   10980   O   LYS D 136    34.346  77.528  40.438  1.00 31.16        O
ATOM   10981   CB  LYS D 136    33.723  76.409  43.528  1.00 28.52        C
ATOM   10982   CG  LYS D 136    35.185  76.058  43.510  1.00 29.82        C
ATOM   10983   CD  LYS D 136    35.526  75.039  44.606  1.00 29.45        C
ATOM   10984   CE  LYS D 136    37.028  74.749  44.684  1.00 28.46        C
ATOM   10985   NZ  LYS D 136    37.331  73.869  45.864  1.00 30.49        N
ATOM   10986   N   ILE D 137    32.679  76.080  40.766  1.00 31.57        N
ATOM   10987   CA  ILE D 137    32.843  75.583  39.410  1.00 32.20        C
ATOM   10988   C   ILE D 137    32.547  76.636  38.342  1.00 30.93        C
ATOM   10989   O   ILE D 137    32.974  76.493  37.207  1.00 30.92        O
ATOM   10990   CB  ILE D 137    31.986  74.336  39.179  1.00 32.91        C
ATOM   10991   CG1 ILE D 137    32.134  73.409  40.374  1.00 32.90        C
ATOM   10992   CG2 ILE D 137    32.479  73.590  37.952  1.00 35.20        C
ATOM   10993   CD1 ILE D 137    31.800  71.967  40.067  1.00 34.82        C
ATOM   10994   N   GLU D 138    31.855  77.709  38.702  1.00 30.57        N
ATOM   10995   CA  GLU D 138    31.551  78.734  37.720  1.00 31.57        C
ATOM   10996   C   GLU D 138    32.588  79.867  37.743  1.00 32.84        C
ATOM   10997   O   GLU D 138    32.516  80.819  36.942  1.00 33.05        O
ATOM   10998   CB  GLU D 138    30.168  79.326  37.972  1.00 32.48        C
ATOM   10999   CG  GLU D 138    29.011  78.341  37.836  1.00 32.97        C
ATOM   11000   CD  GLU D 138    27.650  79.034  37.882  1.00 33.41        C
ATOM   11001   OE1 GLU D 138    27.531  80.095  38.540  1.00 35.12        O
ATOM   11002   OE2 GLU D 138    26.685  78.514  37.272  1.00 33.10        O
ATOM   11003   N   GLY D 139    33.544  79.766  38.656  1.00 33.47        N
ATOM   11004   CA  GLY D 139    34.545  80.808  38.771  1.00 35.35        C
ATOM   11005   C   GLY D 139    33.931  82.121  39.251  1.00 36.23        C
ATOM   11006   O   GLY D 139    34.452  83.210  38.969  1.00 35.89        O
ATOM   11007   N   ASP D 140    32.824  82.027  39.985  1.00 35.14        N
ATOM   11008   CA  ASP D 140    32.140  83.206  40.510  1.00 35.54        C
ATOM   11009   C   ASP D 140    32.771  83.619  41.852  1.00 35.76        C
ATOM   11010   O   ASP D 140    32.772  82.843  42.817  1.00 34.33        O
ATOM   11011   CB  ASP D 140    30.649  82.887  40.691  1.00 36.02        C.
ATOM   11012   CG  ASP D 140    29.853  84.062  41.231  1.00 37.79        C
ATOM   11013   OD1 ASP D 140    30.454  85.129  41.485  1.00 38.34        O
ATOM   11014   OD2 ASP D 140    28.619  83.922  41.407  1.00 37.93        O
ATOM   11015   N   THR D 141    33.324  84.833  41.905  1.00 35.72        N
ATOM   11016   CA  THR D 141    33.949  85.350  43.125  1.00 36.61        C
ATOM   11017   C   THR D 141    33.167  86.565  43.625  1.00 37.10        C
ATOM   11018   O   THR D 141    33.609  87.329  44.489  1.00 38.03        O
ATOM   11019   CB  THR D 141    35.424  85.733  42.862  1.00 37.86        C
ATOM   11020   OG1 THR D 141    35.503  86.525  41.663  1.00 39.06        O
ATOM   11021   CG2 THR D 141    36.288  84.471  42.713  1.00 36.99        C
ATOM   11022   N   SER D 142    31.978  86.719  43.068  1.00 37.68        N
ATOM   11023   CA  SER D 142    31.063  87.789  43.409  1.00 37.41        C
ATOM   11024   C   SER D 142    30.795  87.857  44.927  1.00 36.96        C
ATOM   11025   O   SER D 142    30.484  88.935  45.462  1.00 36.65        O
ATOM   11026   CB  SER D 142    29.761  87.568  42.620  1.00 37.69        C
ATOM   11027   OG  SER D 142    28.608  87.880  43.382  1.00 41.87        O
ATOM   11028   N   VAL D 143    30.939  86.707  45.596  1.00 35.03        N
ATOM   11029   CA  VAL D 143    30.727  86.561  47.039  1.00 33.46        C
ATOM   11030   C   VAL D 143    31.966  85.977  47.721  1.00 33.99        C
ATOM   11031   O   VAL D 143    32.482  84.934  47.340  1.00 33.15        O
ATOM   11032   CB  VAL D 143    29.526  85.618  47.329  1.00 33.63        C
ATOM   11033   CG1 VAL D 143    29.500  85.214  48.808  1.00 32.74        C
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ATOM   11034  CG2 VAL D 143      28.229  86.301  46.940  1.00 33.02           C
ATOM   11035  N   GLU D 144      32.422  86.644  48.769  1.00 34.48           N
ATOM   11036  CA  GLU D 144      33.602  86.203  49.493  1.00 34.11           C
ATOM   11037  C   GLU D 144      33.302  85.062  50.446  1.00 33.00           C
ATOM   11038  O   GLU D 144      34.092  84.128  50.582  1.00 32.74           O
ATOM   11039  CB  GLU D 144      34.220  87.387  50.254  1.00 37.09           C
ATOM   11040  CG  GLU D 144      33.295  88.057  51.289  1.00 39.93           C
ATOM   11041  CD  GLU D 144      31.845  88.273  50.807  1.00 42.06           C
ATOM   11042  OE1 GLU D 144      31.640  88.944  49.764  1.00 41.02           O
ATOM   11043  OE2 GLU D 144      30.909  87.772  51.491  1.00 41.90           O
ATOM   11044  N   ASN D 145      32.149  85.112  51.098  1.00 31.46           N
ATOM   11045  CA  ASN D 145      31.844  84.045  52.035  1.00 29.93           C
ATOM   11046  C   ASN D 145      30.417  83.601  51.850  1.00 28.28           C
ATOM   11047  O   ASN D 145      29.489  84.338  52.202  1.00 29.01           O
ATOM   11048  CB  ASN D 145      32.060  84.554  53.457  1.00 30.42           C
ATOM   11049  CG  ASN D 145      31.659  83.551  54.493  1.00 28.75           C
ATOM   11050  OD1 ASN D 145      30.891  83.873  55.394  1.00 32.30           O
ATOM   11051  ND2 ASN D 145      32.181  82.332  54.388  1.00 27.99           N
ATOM   11052  N   TRP D 146      30.230  82.417  51.273  1.00 27.55           N
ATOM   11053  CA  TRP D 146      28.876  81.930  51.045  1.00 26.97           C
ATOM   11054  C   TRP D 146      28.270  81.446  52.350  1.00 25.99           C
ATOM   11055  O   TRP D 146      27.060  81.507  52.534  1.00 27.38           O
ATOM   11056  CB  TRP D 146      28.865  80.804  50.012  1.00 25.68           C
ATOM   11057  CG  TRP D 146      28.746  81.332  48.620  1.00 26.07           C
ATOM   11058  CD1 TRP D 146      29.731  81.376  47.678  1.00 25.15           C
ATOM   11059  CD2 TRP D 146      27.590  81.951  48.027  1.00 26.94           C
ATOM   11060  NE1 TRP D 146      29.266  81.990  46.543  1.00 25.40           N
ATOM   11061  CE2 TRP D 146      27.959  82.350  46.723  1.00 25.81           C
ATOM   11062  CE3 TRP D 146      26.283  82.203  48.470  1.00 25.11           C
ATOM   11063  CZ2 TRP D 146      27.073  82.985  45.860  1.00 27.06           C
ATOM   11064  CZ3 TRP D 146      25.402  82.832  47.624  1.00 26.28           C
ATOM   11065  CH2 TRP D 146      25.799  83.224  46.322  1.00 27.67           C
ATOM   11066  N   LEU D 147      29.128  80.973  53.239  1.00 26.30           N
ATOM   11067  CA  LEU D 147      28.682  80.501  54.543  1.00 26.95           C
ATOM   11068  C   LEU D 147      28.526  81.594  55.585  1.00 25.76           C
ATOM   11069  O   LEU D 147      29.218  81.611  56.606  1.00 26.67           O
ATOM   11070  CB  LEU D 147      29.619  79.438  55.053  1.00 26.63           C
ATOM   11071  CG  LEU D 147      29.361  78.228  54.178  1.00 30.40           C
ATOM   11072  CD1 LEU D 147      30.432  77.191  54.393  1.00 29.28           C
ATOM   11073  CD2 LEU D 147      27.978  77.674  54.513  1.00 30.22           C
ATOM   11074  N   ALA D 148      27.602  82.501  55.308  1.00 26.18           N
ATOM   11075  CA  ALA D 148      27.267  83.582  56.229  1.00 25.81           C
ATOM   11076  C   ALA D 148      26.849  82.916  57.557  1.00 25.96           C
ATOM   11077  O   ALA D 148      26.287  81.812  57.562  1.00 27.47           O
ATOM   11078  CB  ALA D 148      26.111  84.386  55.671  1.00 26.79           C
ATOM   11079  N   PRO D 149      27.135  83.557  58.701  1.00 23.98           N
ATOM   11080  CA  PRO D 149      26.751  82.952  59.981  1.00 20.87           C
ATOM   11081  C   PRO D 149      25.262  83.032  60.184  1.00 21.43           C
ATOM   11082  O   PRO D 149      24.629  84.029  59.821  1.00 17.96           O
ATOM   11083  CB  PRO D 149      27.519  83.793  61.006  1.00 23.42           C
ATOM   11084  CG  PRO D 149      27.539  85.175  60.351  1.00 21.65           C
ATOM   11085  CD  PRO D 149      27.774  84.878  58.892  1.00 22.73           C
ATOM   11086  N   ILE D 150      24.704  81.965  60.781  1.00 19.05           N
ATOM   11087  CA  ILE D 150      23.279  81.898  61.051  1.00 19.39           C
ATOM   11088  C   ILE D 150      22.985  82.167  62.532  1.00 18.43           C
ATOM   11089  O   ILE D 150      23.596  81.560  63.396  1.00 20.77           O
ATOM   11090  CB  ILE D 150      22.704  80.486  60.740  1.00 18.33           C
ATOM   11091  CG1 ILE D 150      22.914  80.125  59.266  1.00 19.15           C
ATOM   11092  CG2 ILE D 150      21.196  80.492  61.095  1.00 19.16           C
ATOM   11093  CD1 ILE D 150      22.879  78.589  58.987  1.00 19.14           C
ATOM   11094  N   VAL D 151      22.051  83.066  62.803  1.00 19.68           N
ATOM   11095  CA  VAL D 151      21.641  83.375  64.152  1.00 20.62           C
ATOM   11096  C   VAL D 151      20.230  82.857  64.235  1.00 21.30           C
ATOM   11097  O   VAL D 151      19.357  83.321  63.509  1.00 20.95           O
ATOM   11098  CB  VAL D 151      21.711  84.877  64.403  1.00 21.09           C
ATOM   11099  CG1 VAL D 151      20.944  85.260  65.656  1.00 20.39           C
ATOM   11100  CG2 VAL D 151      23.169  85.256  64.500  1.00 21.02           C
ATOM   11101  N   ALA D 152      20.019  81.894  65.136  1.00 21.22           N
ATOM   11102  CA  ALA D 152      18.725  81.231  65.245  1.00 20.95           C
ATOM   11103  C   ALA D 152      17.979  81.410  66.544  1.00 18.82           C
ATOM   11104  O   ALA D 152      18.564  81.606  67.580  1.00 19.98           O
ATOM   11105  CB  ALA D 152      18.913  79.750  64.977  1.00 21.46           C
ATOM   11106  N   ASP D 153      16.665  81.268  66.437  1.00 18.78           N
ATOM   11107  CA  ASP D 153      15.712  81.429  67.521  1.00 18.65           C
ATOM   11108  C   ASP D 153      15.594  80.181  68.406  1.00 18.93           C
ATOM   11109  O   ASP D 153      15.185  79.108  67.938  1.00 18.71           O
ATOM   11110  CB  ASP D 153      14.383  81.729  66.860  1.00 18.43           C
ATOM   11111  CG  ASP D 153      13.403  82.405  67.758  1.00 19.88           C
ATOM   11112  OD1 ASP D 153      13.466  82.252  69.007  1.00 20.88           O
ATOM   11113  OD2 ASP D 153      12.531  83.088  67.180  1.00 20.97           O
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| ATOM | 11114 | N | GLY | D | 154 | 15.949 | 80.311 | 69.682 | 1.00 | 17.03 | N |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 11115 | CA | GLY | D | 154 | 15.848 | 79.181 | 70.591 | 1.00 | 17.38 | C |
| ATOM | 11116 | C | GLY | D | 154 | 14.637 | 79.402 | 71.471 | 1.00 | 16.79 | C |
| ATOM | 11117 | O | GLY | D | 154 | 14.431 | 78.689 | 72.451 | 1.00 | 17.63 | O |
| ATOM | 11118 | N | GLU | D | 155 | 13.849 | 80.424 | 71.118 | 1.00 | 18.66 | N |
| ATOM | 11119 | CA | GLU | D | 155 | 12.632 | 80.793 | 71.843 | 1.00 | 18.85 | C |
| ATOM | 11120 | C | GLU | D | 155 | 12.816 | 80.801 | 73.361 | 1.00 | 20.04 | C |
| ATOM | 11121 | O | GLU | D | 155 | 13.732 | 81.480 | 73.867 | 1.00 | 20.09 | O |
| ATOM | 11122 | CB | GLU | D | 155 | 11.480 | 79.850 | 71.395 | 1.00 | 20.63 | C |
| ATOM | 11123 | CG | GLU | D | 155 | 11.288 | 79.921 | 69.876 | 1.00 | 22.08 | C |
| ATOM | 11124 | CD | GLU | D | 155 | 9.902 | 79.544 | 69.386 | 1.00 | 24.83 | C |
| ATOM | 11125 | OE1 | GLU | D | 155 | 9.135 | 78.932 | 70.167 | 1.00 | 27.41 | O |
| ATOM | 11126 | OE2 | GLU | D | 155 | 9.589 | 79.846 | 68.201 | 1.00 | 27.93 | O |
| ATOM | 11127 | N | ALA | D | 156 | 11.955 | 80.074 | 74.075 | 1.00 | 18.40 | N |
| ATOM | 11128 | CA | ALA | D | 156 | 12.018 | 79.973 | 75.539 | 1.00 | 19.73 | C |
| ATOM | 11129 | C | ALA | D | 156 | 12.553 | 78.621 | 76.002 | 1.00 | 18.81 | C |
| ATOM | 11130 | O | ALA | D | 156 | 12.359 | 78.214 | 77.162 | 1.00 | 19.08 | O |
| ATOM | 11131 | CB | ALA | D | 156 | 10.656 | 80.211 | 76.128 | 1.00 | 19.67 | C |
| ATOM | 11132 | N | GLY | D | 157 | 13.194 | 77.921 | 75.071 | 1.00 | 16.43 | N |
| ATOM | 11133 | CA | GLY | D | 157 | 13.813 | 76.674 | 75.402 | 1.00 | 15.89 | C |
| ATOM | 11134 | C | GLY | D | 157 | 12.948 | 75.437 | 75.281 | 1.00 | 18.12 | C |
| ATOM | 11135 | O | GLY | D | 157 | 13.482 | 74.342 | 75.408 | 1.00 | 19.23 | O |
| ATOM | 11136 | N | PHE | D | 158 | 11.647 | 75.601 | 75.058 | 1.00 | 16.32 | N |
| ATOM | 11137 | CA | PHE | D | 158 | 10.724 | 74.446 | 74.931 | 1.00 | 17.07 | C |
| ATOM | 11138 | C | PHE | D | 158 | 10.704 | 73.565 | 76.184 | 1.00 | 19.02 | C |
| ATOM | 11139 | O | PHE | D | 158 | 10.566 | 72.332 | 76.091 | 1.00 | 18.85 | O |
| ATOM | 11140 | CB | PHE | D | 158 | 11.123 | 73.553 | 73.746 | 1.00 | 18.49 | C |
| ATOM | 11141 | CG | PHE | D | 158 | 10.860 | 74.167 | 72.424 | 1.00 | 21.14 | C |
| ATOM | 11142 | CD1 | PHE | D | 158 | 9.588 | 74.105 | 71.854 | 1.00 | 18.30 | C |
| ATOM | 11143 | CD2 | PHE | D | 158 | 11.854 | 74.902 | 71.783 | 1.00 | 21.32 | C |
| ATOM | 11144 | CE1 | PHE | D | 158 | 9.304 | 74.752 | 70.693 | 1.00 | 18.08 | C |
| ATOM | 11145 | CE2 | PHE | D | 158 | 11.576 | 75.578 | 70.591 | 1.00 | 23.20 | C |
| ATOM | 11146 | CZ | PHE | D | 158 | 10.286 | 75.501 | 70.040 | 1.00 | 21.71 | C |
| ATOM | 11147 | N | GLY | D | 159 | 10.849 | 74.170 | 77.350 | 1.00 | 18.46 | N |
| ATOM | 11148 | CA | GLY | D | 159 | 10.834 | 73.375 | 78.555 | 1.00 | 17.44 | C |
| ATOM | 11149 | C | GLY | D | 159 | 11.758 | 73.873 | 79.648 | 1.00 | 19.05 | C |
| ATOM | 11150 | O | GLY | D | 159 | 11.780 | 75.063 | 79.954 | 1.00 | 20.20 | O |
| ATOM | 11151 | N | GLY | D | 160 | 12.529 | 72.947 | 80.224 | 1.00 | 17.69 | N |
| ATOM | 11152 | CA | GLY | D | 160 | 13.429 | 73.290 | 81.314 | 1.00 | 19.24 | C |
| ATOM | 11153 | C | GLY | D | 160 | 14.868 | 73.429 | 80.846 | 1.00 | 18.06 | C |
| ATOM | 11154 | O | GLY | D | 160 | 15.114 | 73.456 | 79.641 | 1.00 | 18.28 | O |
| ATOM | 11155 | N | ALA | D | 161 | 15.822 | 73.493 | 81.782 | 1.00 | 17.04 | N |
| ATOM | 11156 | CA | ALA | D | 161 | 17.223 | 73.629 | 81.378 | 1.00 | 17.04 | C |
| ATOM | 11157 | C | ALA | D | 161 | 17.739 | 72.507 | 80.473 | 1.00 | 16.82 | C |
| ATOM | 11158 | O | ALA | D | 161 | 18.616 | 72.737 | 79.641 | 1.00 | 15.98 | O |
| ATOM | 11159 | CB | ALA | D | 161 | 18.118 | 73.767 | 82.617 | 1.00 | 18.16 | C |
| ATOM | 11160 | N | LEU | D | 162 | 17.204 | 71.290 | 80.626 | 1.00 | 16.02 | N |
| ATOM | 11161 | CA | LEU | D | 162 | 17.646 | 70.176 | 79.786 | 1.00 | 15.85 | C |
| ATOM | 11162 | C | LEU | D | 162 | 17.059 | 70.301 | 78.366 | 1.00 | 15.03 | C |
| ATOM | 11163 | O | LEU | D | 162 | 17.677 | 69.846 | 77.405 | 1.00 | 15.98 | O |
| ATOM | 11164 | CB | LEU | D | 162 | 17.245 | 68.826 | 80.430 | 1.00 | 14.59 | C |
| ATOM | 11165 | CG | LEU | D | 162 | 17.825 | 68.650 | 81.839 | 1.00 | 17.83 | C |
| ATOM | 11166 | CD1 | LEU | D | 162 | 17.273 | 67.354 | 82.480 | 1.00 | 18.02 | C |
| ATOM | 11167 | CD2 | LEU | D | 162 | 19.360 | 68.550 | 81.740 | 1.00 | 16.42 | C |
| ATOM | 11168 | N | ASN | D | 163 | 15.859 | 70.861 | 78.227 | 1.00 | 13.99 | N |
| ATOM | 11169 | CA | ASN | D | 163 | 15.285 | 71.071 | 76.893 | 1.00 | 11.99 | C |
| ATOM | 11170 | C | ASN | D | 163 | 16.147 | 72.157 | 76.200 | 1.00 | 13.83 | C |
| ATOM | 11171 | O | ASN | D | 163 | 16.429 | 72.051 | 74.997 | 1.00 | 13.61 | O |
| ATOM | 11172 | CB | ASN | D | 163 | 13.814 | 71.525 | 76.963 | 1.00 | 14.95 | C |
| ATOM | 11173 | CG | ASN | D | 163 | 12.881 | 70.425 | 77.533 | 1.00 | 14.54 | C |
| ATOM | 11174 | OD1 | ASN | D | 163 | 12.327 | 69.585 | 76.780 | 1.00 | 19.52 | O |
| ATOM | 11175 | ND2 | ASN | D | 163 | 12.743 | 70.401 | 78.841 | 1.00 | 13.63 | N |
| ATOM | 11176 | N | VAL | D | 164 | 16.564 | 73.180 | 76.950 | 1.00 | 11.92 | N |
| ATOM | 11177 | CA | VAL | D | 164 | 17.411 | 74.237 | 76.379 | 1.00 | 13.16 | C |
| ATOM | 11178 | C | VAL | D | 164 | 18.715 | 73.617 | 75.866 | 1.00 | 12.58 | C |
| ATOM | 11179 | O | VAL | D | 164 | 19.172 | 73.896 | 74.751 | 1.00 | 14.01 | O |
| ATOM | 11180 | CB | VAL | D | 164 | 17.780 | 75.322 | 77.478 | 1.00 | 12.03 | C |
| ATOM | 11181 | CG1 | VAL | D | 164 | 18.831 | 76.306 | 76.920 | 1.00 | 14.63 | C |
| ATOM | 11182 | CG2 | VAL | D | 164 | 16.562 | 76.089 | 77.911 | 1.00 | 15.19 | C |
| ATOM | 11183 | N | TYR | D | 165 | 19.306 | 72.775 | 76.709 | 1.00 | 13.89 | N |
| ATOM | 11184 | CA | TYR | D | 165 | 20.560 | 72.109 | 76.415 | 1.00 | 13.23 | C |
| ATOM | 11185 | C | TYR | D | 165 | 20.431 | 71.343 | 75.100 | 1.00 | 14.96 | C |
| ATOM | 11186 | O | TYR | D | 165 | 21.261 | 71.503 | 74.195 | 1.00 | 11.81 | O |
| ATOM | 11187 | CB | TYR | D | 165 | 20.955 | 71.188 | 77.593 | 1.00 | 13.02 | C |
| ATOM | 11188 | CG | TYR | D | 165 | 22.272 | 70.455 | 77.396 | 1.00 | 14.17 | C |
| ATOM | 11189 | CD1 | TYR | D | 165 | 22.363 | 69.364 | 76.545 | 1.00 | 12.88 | C |
| ATOM | 11190 | CD2 | TYR | D | 165 | 23.455 | 70.939 | 77.972 | 1.00 | 13.98 | C |
| ATOM | 11191 | CE1 | TYR | D | 165 | 23.614 | 68.755 | 76.246 | 1.00 | 14.97 | C |
| ATOM | 11192 | CE2 | TYR | D | 165 | 24.723 | 70.340 | 77.682 | 1.00 | 14.77 | C |
| ATOM | 11193 | CZ | TYR | D | 165 | 24.798 | 69.250 | 76.824 | 1.00 | 16.02 | C |

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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11194 | OH | TYR D 165 | 26.014 | 68.615 | 76.554 | 1.00 | 16.58 | | O |
| ATOM | 11195 | N | GLU D 166 | 19.389 | 70.517 | 74.965 | 1.00 | 12.91 | | N |
| ATOM | 11196 | CA | GLU D 166 | 19.241 | 69.757 | 73.734 | 1.00 | 12.72 | | C |
| ATOM | 11197 | C | GLU D 166 | 19.007 | 70.615 | 72.512 | 1.00 | 13.19 | | C |
| ATOM | 11198 | O | GLU D 166 | 19.516 | 70.305 | 71.440 | 1.00 | 14.20 | | O |
| ATOM | 11199 | CB | GLU D 166 | 18.105 | 68.716 | 73.871 | 1.00 | 14.79 | | C |
| ATOM | 11200 | CG | GLU D 166 | 18.496 | 67.528 | 74.806 | 1.00 | 15.40 | | C |
| ATOM | 11201 | CD | GLU D 166 | 19.774 | 66.827 | 74.333 | 1.00 | 17.66 | | C |
| ATOM | 11202 | OE1 | GLU D 166 | 19.810 | 66.398 | 73.157 | 1.00 | 17.87 | | O |
| ATOM | 11203 | OE2 | GLU D 166· | 20.727 | 66.685 | 75.137 | 1.00 | 15.81 | | O |
| ATOM | 11204 | N | LEU D 167 | 18.239 | 71.700 | 72.656 | 1.00 | 15.38 | | N |
| ATOM | 11205 | CA | LEU D 167 | 17.989 | 72.564 | 71.523 | 1.00 | 13.84 | | C |
| ATOM | 11206 | C | LEU D 167 | 19.298 | 73.197 | 71.081 | 1.00 | 13.92 | | C |
| ATOM | 11207 | O | LEU D 167 | 19.619 | 73.197 | 69.904 | 1.00 | 13.21 | | O |
| ATOM | 11208 | CB | LEU D 167 | 16.958 | 73.627 | 71.860 | 1.00 | 15.17 | | C |
| ATOM | 11209 | CG | LEU D 167 | 16.687 | 74.708 | 70.796 | 1.00 | 13.26 | | C |
| ATOM | 11210 | CD1 | LEU D 167 | 16.528 | 74.087 | 69.380 | 1.00 | 12.43 | | C |
| ATOM | 11211 | CD2 | LEU D 167 | 15.434 | 75.509 | 71.171 | 1.00 | 13.61 | | C |
| ATOM | 11212 | N | GLN D 168 | 20.085 | 73.700 | 72.035 | 1.00 | 15.16 | | N |
| ATOM | 11213 | CA | GLN D 168 | 21.372 | 74.307 | 71.682 | 1.00 | 14.65 | | C |
| ATOM | 11214 | C | GLN D 168 | 22.269 | 73.295 | 70.976 | 1.00 | 13.91 | | C |
| ATOM | 11215 | O | GLN D 168 | 22.903 | 73.617 | 69.957 | 1.00 | 15.02 | | O |
| ATOM | 11216 | CB | GLN D 168 | 22.076 | 74.840 | 72.959 | 1.00 | 15.16 | | C |
| ATOM | 11217 | CG | GLN D 168 | 23.496 | 75.383 | 72.662 | 1.00 | 17.37 | | C |
| ATOM | 11218 | CD | GLN D 168 | 23.480 | 76.767 | 72.035 | 1.00 | 19.70 | | C |
| ATOM | 11219 | OE1 | GLN D 168 | 22.710 | 77.044 | 71.104 | 1.00 | 17.53 | | O |
| ATOM | 11220 | NE2 | GLN D 168 | 24.324 | 77.667 | 72.564 | 1.00 | 19.21 | | N |
| ATOM | 11221 | N | LYS D 169 | 22.325 | 72.078 | 71.519 | 1.00 | 13.37 | | N |
| ATOM | 11222 | CA | LYS D 169 | 23.138 | 70.996 | 70.953 | 1.00 | 12.97 | | C |
| ATOM | 11223 | C | LYS D 169 | 22.716 | 70.683 | 69.514 | 1.00 | 15.44 | | C |
| ATOM | 11224 | O | LYS D 169 | 23.558 | 70.537 | 68.613 | 1.00 | 12.79 | | O |
| ATOM | 11225 | CB | LYS D 169 | 23.032 | 69.738 | 71.842 | 1.00 | 13.01 | | C |
| ATOM | 11226 | CG | LYS D 169 | 23.741 | 68.536 | 71.304 | 1.00 | 11.72 | | C |
| ATOM | 11227 | CD | LYS D 169 | 23.591 | 67.332 | 72.240 | 1.00 | 15.48 | | C |
| ATCM | 11228 | CE | LYS D 169 | 24.123 | 66.052 | 71.557 | 1.00 | 16.12 | | C |
| ATOM | 11229 | NZ | LYS D 169 | 24.070 | 64.872 | 72.508 | 1.00 | 18.65 | | N |
| ATOM | 11230 | N | ALA D 170 | 21.403 | 70.599 | 69.282 | 1.00 | 12.30 | | N |
| ATOM | 11231 | CA | ALA D 170 | 20.916 | 70.323 | 67.935 | 1.00 | 13.09 | | C |
| ATOM | 11232 | C | ALA D 170 | 21.199 | 71.518 | 66.992 | 1.00 | 9.52 | | C |
| ATOM | 11233 | O | ALA D 170 | 21.469 | 71.320 | 65.807 | 1.00 | 9.19 | | O |
| ATOM | 11234 | CB | ALA D 170 | 19.376 | 70.013 | 67.977 | 1.00 | 10.15 | | C |
| ATOM | 11235 | N | LEU D 171 | 21.094 | 72.744 | 67.502 | 1.0C | 11.51 | | N |
| ATOM | 11236 | CA | LEU D 171 | 21.376 | 73.910 | 66.662 | 1.00 | 13.01 | | C |
| ATOM | 11237 | C | LEU D 171 | 22.836 | 73.873 | 66.185 | 1.00 | 12.04 | | C |
| ATOM | 11238 | O | LEU D 171 | 23.163 | 74.208 | 65.024 | 1.00 | 12.47 | | O |
| ATOM | 11239 | CB | LEU D 171 | 21.115 | 75.225 | 67.430 | 1.00 | 12.97 | | C |
| ATOM | 11240 | CG | LEU D 171 | 19.636 | 75.595 | 67.691 | 1.00 | 13.88 | | C |
| ATOM | 11241 | CD1 | LEU D 171 | 19.583 | 76.811 | 68.598 | 1.00 | 15.94 | | C |
| ATOM | 11242 | CD2 | LEU D 171 | 18.930 | 75.871 | 66.366 | 1.00 | 12.56 | | C |
| ATOM | 11243 | N | ILE D 172 | 23.710 | 73.478 | 67.098 | 1.00 | 15.61 | | N |
| ATOM | 11244 | CA | ILE D 172 | 25.140 | 73.375 | 66.817 | 1.00 | 15.56 | | C |
| ATOM | 11245 | C | ILE D 172 | 25.456 | 72.242 | 65.867 | 1.00 | 16.47 | | C |
| ATOM | 11246 | O | ILE D 172 | 26.319 | 72.365 | 64.964 | 1.00 | 16.47 | | O |
| ATOM | 11247 | CB | ILE D 172 | 25.948 | 73.198 | 68.153 | 1.00 | 17.24 | | C |
| ATOM | 11248' | CG1 | ILE D 172 | 26.040 | 74.546 | 68.856 | 1.00 | 16.01 | | C |
| ATOM | 11249 | CG2 | ILE D 172 | 27.350 | 72.672 | 67.867 | 1.00 | 13.28 | | C |
| ATOM | 11250 | CD1 | ILE D 172 | 26.337 | 74.432 | 70.401 | 1.00 | 18.73 | | C |
| ATOM | 11251 | N | ALA D 173 | 24.769 | 71.111 | 66.033 | 1.00 | 13.94 | | N |
| ATOM | 11252 | CA | ALA D 173 | 25.054 | 70.024 | 65.128 | 1.00 | 15.12 | | C |
| ATOM | 11253 | C | ALA D 173 | 24.640 | 70.440 | 63.713 | 1.00 | 15.04 | | C |
| ATOM | 11254 | O | ALA D 173 | 25.245 | 70.000 | 62.744 | 1.00 | 17.40 | | O |
| ATOM | 11255 | CB | ALA D 173 | 24.300 | 68.735 | 65.576 | 1.00 | 14.22 | | C |
| ATOM | 11256 | N | ALA D 174 | 23.639 | 71.302 | 63.611 | 1.00 | 15.30 | | N |
| ATOM | 11257 | CA | ALA D 174 | 23.116 | 71.794 | 62.317 | 1.00 | 16.21 | | C |
| ATOM | 11258 | C | ALA D 174 | 23.995 | 72.876 | 61.691 | 1.00 | 17.70 | | C |
| ATOM | 11259 | O | ALA D 174 | 23.845 | 73.206 | 60.503 | 1.00 | 19.97 | | O |
| ATOM | 11260 | CB | ALA D 174 | 21.684 | 72.329 | 62.495 | 1.00 | 13.67 | | C |
| ATOM | 11261 | N | GLY D 175 | 24.895 | 73.435 | 62.496 | 1.00 | 18.89 | | N |
| ATOM | 11262 | CA | GLY D 175 | 25.812 | 74.469 | 62.018 | 1.00 | 18.85 | | C |
| ATOM | 11263 | C | GLY D 175 | 25.465 | 75.908 | 62.344 | 1.00 | 20.49 | | C |
| ATOM | 11264 | O | GLY D 175 | 25.856 | 76.817 | 61.608 | 1.00 | 22.41 | | O |
| ATOM | 11265 | N | VAL D 176 | 24.765 | 76.148 | 63.452 | 1.00 | 18.97 | | N |
| ATOM | 11266 | CA | VAL D 176 | 24.379 | 77.509 | 63.823 | 1.00 | 17.98 | | C |
| ATOM | 11267 | C | VAL D 176 | 25.610 | 78.281 | 64.346 | 1.00 | 18.89 | | C |
| ATOM | 11268 | O | VAL D 176 | 26.500 | 77.674 | 64.905 | 1.00 | 20.75 | | O |
| ATOM | 11269 | CB | VAL D 176 | 23.331 | 77.467 | 64.947 | 1.00 | 18.04 | | C |
| ATOM | 11270 | CG1 | VAL D 176 | 24.008 | 77.406 | 66.308 | 1.00 | 17.78 | | C |
| ATOM | 11271 | CG2 | VAL D 176 | 22.394 | 78.643 | 64.854 | 1.00 | 19.01 | | C |
| ATOM | 11272 | N | ALA D 177 | 25.620 | 79.604 | 64.169 | 1.00 | 20.50 | | N |
| ATOM | 11273 | CA | ALA D 177 | 26.712 | 80.478 | 64.680 | 1.00 | 19.62 | | C |

| ATOM | 11274 | C | ALA | D | 177 | 26.297 | 81.096 | 66.032 | 1.00 | 18.20 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 11275 | O | ALA | D | 177 | 27.106 | 81.293 | 66.924 | 1.00 | 19.35 | O |
| ATOM | 11276 | CB | ALA | D | 177 | 26.997 | 81.601 | 63.674 | 1.00 | 18.58 | C |
| ATOM | 11277 | N | GLY | D | 178 | 25.027 | 81.436 | 66.175 | 1.00 | 19.20 | N |
| ATOM | 11278 | CA | GLY | D | 178 | 24.562 | 82.002 | 67.421 | 1.00 | 19.48 | C |
| ATOM | 11279 | C | GLY | D | 178 | 23.116 | 81.663 | 67.686 | 1.00 | 20.36 | C |
| ATOM | 11280 | O | GLY | D | 178 | 22.363 | 81.328 | 66.746 | 1.00 | 17.93 | O |
| ATOM | 11281 | N | SER | D | 179 | 22.725 | 81.720 | 68.950 | 1.00 | 19.23 | N |
| ATOM | 11282 | CA | SER | D | 179 | 21.339 | 81.426 | 69.315 | 1.00 | 19.25 | C |
| ATOM | 11283 | C | SER | D | 179 | 20.816 | 82.391 | 70.362 | 1.00 | 17.40 | C |
| ATOM | 11284 | O | SER | D | 179 | 21.562 | 82.830 | 71.213 | 1.00 | 19.08 | O |
| ATOM | 11285 | CB | SER | D | 179 | 21.208 | 79.988 | 69.817 | 1.00 | 18.37 | C |
| ATOM | 11286 | OG | SER | D | 179 | 22.178 | 79.667 | 70.794 | 1.00 | 17.57 | O |
| ATOM | 11287 | N | HIS | D | 180 | 19.535 | 82.727 | 70.298 | 1.00 | 18.75 | N |
| ATOM | 11288 | CA | HIS | D | 180 | 18.953 | 83.635 | 71.281 | 1.00 | 20.09 | C |
| ATOM | 11289 | C | HIS | D | 180 | 17.904 | 82.941 | 72.153 | 1.00 | 20.83 | C |
| ATOM | 11290 | O | HIS | D | 180 | 17.173 | 82.050 | 71.697 | 1.00 | 19.65 | O |
| ATOM | 11291 | CB | HIS | D | 180 | 18.401 | 84.912 | 70.627 | 1.00 | 18.16 | C |
| ATOM | 11292 | CG | HIS | D | 180 | 17.183 | 84.735 | 69.757 | 1.00 | 18.53 | C |
| ATOM | 11293 | ND1 | HIS | D | 180 | 17.231 | 84.900 | 68.387 | 1.00 | 20.52 | N |
| ATOM | 11294 | CD2 | HIS | D | 180 | 15.869 | 84.629 | 70.069 | 1.00 | 17.63 | C |
| ATOM | 11295 | CE1 | HIS | D | 180 | 16.007 | 84.911 | 67.898 | 1.00 | 17.39 | C |
| ATOM | 11296 | NE2 | HIS | D | 180 | 15.161 | 84.748 | 68.896 | 1.00 | 19.83 | N |
| ATOM | 11297 | N | TRP | D | 181 | 17.854 | 83.352 | 73.413 | 1.00 | 17.93 | N |
| ATOM | 11298 | CA | TRP | D | 181 | 16.976 | 82.747 | 74.415 | 1.00 | 17.84 | C |
| ATOM | 11299 | C | TRP | D | 181 | 16.244 | 83.823 | 75.194 | 1.00 | 19.03 | C |
| ATOM | 11300 | O | TRP | D | 181 | 16.881 | 84.768 | 75.647 | 1.00 | 20.04 | O |
| ATOM | 11301 | CB | TRP | D | 181 | 17.838 | 81.921 | 75.359 | 1.00 | 15.40 | C |
| ATOM | 11302 | CG | TRP | D | 181 | 18.774 | 81.054 | 74.621 | 1.00 | 18.94 | C |
| ATOM | 11303 | CD1 | TRP | D | 181 | 19.998 | 81.404 | 74.100 | 1.00 | 17.50 | C |
| ATOM | 11304 | CD2 | TRP | D | 181 | 18.522 | 79.706 | 74.185 | 1.00 | 17.19 | C |
| ATOM | 11305 | NE1 | TRP | D | 181 | 20.513 | 80.359 | 73.364 | 1.00 | 17.06 | N |
| ATOM | 11306 | CE2 | TRP | D | 181 | 19.630 | 79.303 | 73.403 | 1.00 | 18.26 | C |
| ATOM | 11307 | CE3 | TRP | D | 181 | 17.465 | 78.799 | 74.382 | 1.00 | 18.70 | C |
| ATOM | 11308 | CZ2 | TRP | D | 181 | 19.716 | 78.019 | 72.808 | 1.00 | 16.84 | C |
| ATOM | 11309 | CZ3 | TRP | D | 181 | 17.557 | 77.494 | 73.781 | 1.00 | 16.96 | C |
| ATOM | 11310 | CH2 | TRP | D | 181 | 18.665 | 77.134 | 73.014 | 1.00 | 18.27 | C |
| ATOM | 11311 | N | GLU | D | 182 | 14.926 | 83.687 | 75.370 | 1.00 | 19.49 | N |
| ATOM | 11312 | CA | GLU | D | 182 | 14.131 | 84.688 | 76.083 | 1.00 | 20.01 | C |
| ATOM | 11313 | C | GLU | D | 182 | 13.609 | 84.267 | 77.454 | 1.00 | 19.67 | C |
| ATOM | 11314 | O | GLU | D | 182 | 13.368 | 83.087 | 77.695 | 1.00 | 18.39 | O |
| ATOM | 11315 | CB | GLU | D | 182 | 12.930 | 85.096 | 75.246 | 1.00 | 21.39 | C |
| ATOM | 11316 | CG | GLU | D | 182 | 11.905 | 83.965 | 75.075 | 1.00 | 22.21 | C |
| ATOM | 11317 | CD | GLU | D | 182 | 11.281 | 83.927 | 73.675 | 1.00 | 25.21 | C |
| ATOM | 11318 | OE1 | GLU | D | 182 | 11.962 | 84.297 | 72.683 | 1.00 | 26.94 | O |
| ATOM | 11319 | OE2 | GLU | D | 182 | 10.113 | 83.514 | 73.571 | 1.00 | 26.22 | O |
| ATOM | 11320 | N | ASP | D | 183 | 13.376 | 85.262 | 78.315 | 1.00 | 18.49 | N |
| ATOM | 11321 | CA | ASP | D | 183 | 12.899 | 85.040 | 79.663 | 1.00 | 19.78 | C |
| ATOM | 11322 | C | ASP | D | 183 | 11.386 | 84.895 | 79.791 | 1.00 | 20.63 | C |
| ATOM | 11323 | O | ASP | D | 183 | 10.778 | 85.510 | 80.658 | 1.00 | 21.59 | O |
| ATOM | 11324 | CB | ASP | D | 183 | 13.397 | 86.132 | 80.622 | 1.00 | 21.09 | C |
| ATOM | 11325 | CG | ASP | D | 183 | 13.129 | 87.543 | 80.107 | 1.00 | 24.30 | C |
| ATOM | 11326 | OD1 | ASP | D | 183 | 12.280 | 87.694 | 79.179 | 1.00 | 24.08 | O |
| ATOM | 11327 | OD2 | ASP | D | 183 | 13.771 | 88.490 | 80.642 | 1.00 | 20.92 | O |
| ATOM | 11328 | N | GLN | D | 184 | 10.780 | 84.090 | 78.905 | 1.00 | 20.06 | N |
| ATOM | 11329 | CA | GLN | D | 184 | 9.353 | 83.823 | 79.006 | 1.00 | 21.34 | C |
| ATOM | 11330 | C | GLN | D | 184 | 9.127 | 82.373 | 79.422 | 1.00 | 21.75 | C |
| ATOM | 11331 | O | GLN | D | 184 | 9.986 | 81.502 | 79.234 | 1.00 | 23.13 | O |
| ATOM | 11332 | CB | GLN | D | 184 | 8.652 | 83.996 | 77.671 | 1.00 | 21.51 | C |
| ATOM | 11333 | CG | GLN | D | 184 | 8.648 | 85.375 | 77.098 | 1.00 | 21.96 | C |
| ATOM | 11334 | CD | GLN | D | 184 | 7.850 | 85.384 | 75.828 | 1.00 | 18.59 | C |
| ATOM | 11335 | OE1 | GLN | D | 184 | 6.736 | 84.926 | 75.817 | 1.00 | 24.18 | O |
| ATOM | 11336 | NE2 | GLN | D | 184 | 8.415 | 85.903 | 74.762 | 1.00 | 22.26 | N |
| ATOM | 11337 | N | LEU | D | 185 | 7.940 | 82.123 | 79.963 | 1.00 | 22.12 | N |
| ATOM | 11338 | CA | LEU | D | 185 | 7.507 | 80.787 | 80.371 | 1.00 | 21.97 | C |
| ATOM | 11339 | C | LEU | D | 185 | 7.282 | 80.062 | 79.042 | 1.00 | 23.12 | C |
| ATOM | 11340 | O | LEU | D | 185 | 6.411 | 80.490 | 78.260 | 1.00 | 22.21 | O |
| ATOM | 11341 | CB | LEU | D | 185 | 6.178 | 80.911 | 81.125 | 1.00 | 21.03 | C |
| ATOM | 11342 | CG | LEU | D | 185 | 5.417 | 79.642 | 81.462 | 1.00 | 22.66 | C |
| ATOM | 11343 | CD1 | LEU | D | 185 | 6.361 | 78.740 | 82.184 | 1.00 | 23.24 | C |
| ATOM | 11344 | CD2 | LEU | D | 185 | 4.185 | 79.935 | 82.330 | 1.00 | 23.35 | C |
| ATOM | 11345 | N | ALA | D | 186 | 8.048 | 78.990 | 78.763 | 1.00 | 22.11 | N |
| ATOM | 11346 | CA | ALA | D | 186 | 7.878 | 78.289 | 77.476 | 1.00 | 21.59 | C |
| ATOM | 11347 | C | ALA | D | 186 | 6.443 | 77.822 | 77.193 | 1.00 | 20.71 | C |
| ATOM | 11348 | O | ALA | D | 186 | 5.982 | 77.920 | 76.065 | 1.00 | 22.14 | O |
| ATOM | 11349 | CB | ALA | D | 186 | 8.843 | 77.086 | 77.383 | 1.00 | 20.08 | C |
| ATOM | 11350 | N | SER | D | 187 | 5.753 | 77.309 | 78.201 | 1.00 | 21.13 | N |
| ATOM | 11351 | CA | SER | D | 187 | 4.398 | 76.830 | 77.982 | 1.00 | 22.79 | C |
| ATOM | 11352 | C | SER | D | 187 | 3.397 | 77.923 | 77.659 | 1.00 | 23.19 | C |
| ATOM | 11353 | O | SER | D | 187 | 2.247 | 77.626 | 77.347 | 1.00 | 23.73 | O |

| ATOM | 11354 | CB | SER D 187 | 3.909 | 76.054 | 79.192 | 1.00 23.94 | C |
|------|-------|-----|-----------|-------|--------|--------|------------|---|
| ATOM | 11355 | OG | SER D 187 | 3.938 | 76.872 | 80.345 | 1.00 27.76 | O |
| ATOM | 11356 | N | GLU D 188 | 3.821 | 79.177 | 77.754 | 1.00 22.91 | N |
| ATOM | 11357 | CA | GLU D 188 | 2.926 | 80.301 | 77.451 | 1.00 26.04 | C |
| ATOM | 11358 | C | GLU D 188 | 3.638 | 81.289 | 76.536 | 1.00 23.46 | C |
| ATOM | 11359 | O | GLU D 188 | 3.187 | 82.423 | 76.351 | 1.00 24.94 | O |
| ATOM | 11360 | CB | GLU D 188 | 2.509 | 81.024 | 78.740 | 1.00 26.40 | C |
| ATOM | 11361 | CG | GLU D 188 | 1.634 | 80.216 | 79.672 | 1.00 29.73 | C |
| ATOM | 11362 | CD | GLU D 188 | 0.388 | 79.668 | 78.985 | 1.00 31.09 | C |
| ATOM | 11363 | OE1 | GLU D 188 | -0.202 | 80.369 | 78.115 | 1.00 34.15 | O |
| ATOM | 11364 | OE2 | GLU D 188 | -0.015 | 78.531 | 79.321 | 1.00 31.72 | O |
| ATOM | 11365 | N | LYS D 189 | 4.740 | 80.834 | 75.949 | 1.00 24.12 | N |
| ATOM | 11366 | CA | LYS D 189 | 5.561 | 81.656 | 75.068 | 1.00 23.45 | C |
| ATOM | 11367 | C | LYS D 189 | 4.732 | 82.403 | 74.021 | 1.00 24.71 | C |
| ATOM | 11368 | O | LYS D 189 | 3.734 | 81.895 | 73.506 | 1.00 24.58 | O |
| ATOM | 11369 | CB | LYS D 189 | 6.611 | 80.774 | 74.384 | 1.00 23.24 | C |
| ATOM | 11370 | CG | LYS D 189 | 7.609 | 81.475 | 73.470 | 1.00 23.07 | C |
| ATOM | 11371 | CD | LYS D 189 | 7.068 | 81.591 | 72.057 | 1.00 24.26 | C |
| ATOM | 11372 | CE | LYS D 189 | 8.148 | 82.059 | 71.091 | 1.00 25.62 | C |
| ATOM | 11373 | NZ | LYS D 189 | 8.667 | 83.419 | 71.425 | 1.00 26.47 | N |
| ATOM | 11374 | N | LYS D 190 | 5.156 | 83.633 | 73.746 | 1.00 24.10 | N |
| ATOM | 11375 | CA | LYS D 190 | 4.485 | 84.479 | 72.767 | 1.00 24.08 | C |
| ATOM | 11376 | C | LYS D 190 | 5.528 | 85.196 | 71.949 | 1.00 23.44 | C |
| ATOM | 11377 | O | LYS D 190 | 6.686 | 85.344 | 72.365 | 1.00 23.36 | O |
| ATOM | 11378 | CB | LYS D 190 | 3.668 | 85.578 | 73.461 | 1.00 24.07 | C |
| ATOM | 11379 | CG | LYS D 190 | 2.552 | 85.090 | 74.343 | 1.00 25.40 | C |
| ATOM | 11380 | CD | LYS D 190 | 1.370 | 84.565 | 73.563 | 1.00 25.56 | C |
| ATOM | 11381 | CE | LYS D 190 | 0.193 | 84.312 | 74.495 | 1.00 27.30 | C |
| ATOM | 11382 | NZ | LYS D 190 | 0.569 | 83.406 | 75.647 | 1.00 23.43 | N |
| ATOM | 11383 | N | CYS D 191 | 5.097 | 85.629 | 70.773 | 1.00 23.55 | N |
| ATOM | 11384 | CA | CYS D 191 | 5.895 | 86.466 | 69.917 | 1.00 23.94 | C |
| ATOM | 11385 | C | CYS D 191 | 6.079 | 87.706 | 70.862 | 1.00 24.79 | C |
| ATOM | 11386 | O | CYS D 191 | 5.243 | 87.941 | 71.740 | 1.00 25.84 | O |
| ATOM | 11387 | CB | CYS D 191 | 5.030 | 86.787 | 68.698 | 1.00 24.91 | C |
| ATOM | 11388 | SG | CYS D 191 | 5.209 | 88.386 | 67.909 | 1.00 28.81 | S |
| ATOM | 11389 | N | GLY D 192 | 7.139 | 88.478 | 70.694 | 1.00 24.03 | N |
| ATOM | 11390 | CA | GLY D 192 | 7.333 | 89.626 | 71.570 | 1.00 26.03 | C |
| ATOM | 11391 | C | GLY D 192 | 6.307 | 90.742 | 71.435 | 1.00 27.40 | C |
| ATOM | 11392 | O | GLY D 192 | 6.207 | 91.600 | 72.323 | 1.00 27.25 | O |
| ATOM | 11393 | N | HIS D 193 | 5.519 | 90.705 | 70.357 | 1.00 27.13 | N |
| ATOM | 11394 | CA | HIS D 193 | 4.526 | 91.721 | 70.093 | 1.00 26.90 | C |
| ATOM | 11395 | C | HIS D 193 | 3.092 | 91.255 | 70.237 | 1.00 28.32 | C |
| ATOM | 11396 | O | HIS D 193 | 2.148 | 91.939 | 69.846 | 1.00 27.96 | O |
| ATOM | 11397 | CB | HIS D 193 | 4.844 | 92.311 | 68.730 | 1.00 27.31 | C |
| ATOM | 11398 | CG | HIS D 193 | 6.223 | 92.900 | 68.688 | 1.00 28.37 | C |
| ATOM | 11399 | ND1 | HIS D 193 | 7.188 | 92.509 | 67.783 | 1.00 27.39 | N |
| ATOM | 11400 | CD2 | HIS D 193 | 6.813 | 93.828 | 69.487 | 1.00 28.77 | C |
| ATOM | 11401 | CE1 | HIS D 193 | 8.311 | 93.167 | 68.022 | 1.00 27.30 | C |
| ATOM | 11402 | NE2 | HIS D 193 | 8.111 | 93.973 | 69.052 | 1.00 28.53 | N |
| ATOM | 11403 | N | LEU D 194 | 2.934 | 90.069 | 70.814 | 1.00 27.38 | N |
| ATOM | 11404 | CA | LEU D 194 | 1.609 | 89.543 | 71.087 | 1.00 27.50 | C |
| ATOM | 11405 | C | LEU D 194 | 1.379 | 89.821 | 72.564 | 1.00 27.95 | C |
| ATOM | 11406 | O | LEU D 194 | 2.314 | 90.168 | 73.281 | 1.00 30.67 | O |
| ATOM | 11407 | CB | LEU D 194 | 1.545 | 88.040 | 70.799 | 1.00 26.19 | C |
| ATOM | 11408 | CG | LEU D 194 | 1.303 | 87.720 | 69.310 | 1.00 27.94 | C |
| ATOM | 11409 | CD1 | LEU D 194 | 1.454 | 86.219 | 69.065 | 1.00 28.49 | C |
| ATOM | 11410 | CD2 | LEU D 194 | -0.122 | 88.159 | 68.908 | 1.00 27.10 | C |
| ATOM | 11411 | N | GLY D 195 | 0.138 | 89.714 | 73.013 | 1.00 28.40 | N |
| ATOM | 11412 | CA | GLY D 195 | -0.139 | 89.941 | 74.412 | 1.00 27.38 | C |
| ATOM | 11413 | C | GLY D 195 | -0.113 | 88.593 | 75.087 | 1.00 27.76 | C |
| ATOM | 11414 | O | GLY D 195 | 0.260 | 87.585 | 74.453 | 1.00 26.45 | O |
| ATOM | 11415 | N | GLY D 196 | -0.475 | 88.583 | 76.371 | 1.00 27.27 | N |
| ATOM | 11416 | CA | GLY D 196 | -0.536 | 87.348 | 77.123 | 1.00 26.93 | C |
| ATOM | 11417 | C | GLY D 196 | 0.815 | 86.752 | 77.461 | 1.00 27.56 | C |
| ATOM | 11418 | O | GLY D 196 | 0.912 | 85.530 | 77.626 | 1.00 26.50 | O |
| ATOM | 11419 | N | LYS D 197 | 1.846 | 87.590 | 77.580 | 1.00 26.09 | N |
| ATOM | 11420 | CA | LYS D 197 | 3.188 | 87.081 | 77.921 | 1.00 25.53 | C |
| ATOM | 11421 | C | LYS D 197 | 3.393 | 86.900 | 79.429 | 1.00 25.13 | C |
| ATOM | 11422 | O | LYS D 197 | 2.837 | 87.643 | 80.237 | 1.00 23.77 | O |
| ATOM | 11423 | CB | LYS D 197 | 4.259 | 88.024 | 77.403 | 1.00 26.41 | C |
| ATOM | 11424 | CG | LYS D 197 | 4.247 | 88.176 | 75.917 | 1.00 27.43 | C |
| ATOM | 11425 | CD | LYS D 197 | 5.558 | 88.734 | 75.393 | 1.00 27.04 | C |
| ATOM | 11426 | CE | LYS D 197 | 5.778 | 90.198 | 75.726 | 1.00 27.38 | C |
| ATOM | 11427 | NZ | LYS D 197 | 7.013 | 90.646 | 75.054 | 1.00 28.07 | N |
| ATOM | 11428 | N | VAL D 198 | 4.224 | 85.920 | 79.796 | 1.00 24.32 | N |
| ATOM | 11429 | CA | VAL D 198 | 4.526 | 85.629 | 81.202 | 1.00 22.84 | C |
| ATOM | 11430 | C | VAL D 198 | 6.029 | 85.411 | 81.341 | 1.00 21.15 | C |
| ATOM | 11431 | O | VAL D 198 | 6.592 | 84.560 | 80.645 | 1.00 20.60 | O |
| ATOM | 11432 | CB | VAL D 198 | 3.808 | 84.367 | 81.663 | 1.00 23.49 | C |
| ATOM | 11433 | CG1 | VAL D 198 | 4.102 | 84.094 | 83.148 | 1.00 22.82 | C |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11434 | CG2 | VAL | D | 198 | 2.309 | 84.511 | 81.438 | 1.00 | 23.46 | C |
| ATOM | 11435 | N | LEU | D | 199 | 6.672 | 86.202 | 82.201 | 1.00 | 19.82 | N |
| ATOM | 11436 | CA | LEU | D | 199 | 8.126 | 86.073 | 82.460 | 1.00 | 20.68 | C |
| ATOM | 11437 | C | LEU | D | 199 | 8.364 | 84.979 | 83.475 | 1.00 | 19.13 | C |
| ATOM | 11438 | O | LEU | D | 199 | 7.448 | 84.545 | 84.203 | 1.00 | 20.16 | O |
| ATOM | 11439 | CB | LEU | D | 199 | 8.707 | 87.348 | 83.083 | 1.00 | 21.00 | C |
| ATOM | 11440 | CG | LEU | D | 199 | 8.513 | 88.657 | 82.313 | 1.00 | 24.34 | C |
| ATOM | 11441 | CD1 | LEU | D | 199 | 9.009 | 89.858 | 83.186 | 1.00 | 23.73 | C |
| ATOM | 11442 | CD2 | LEU | D | 199 | 9.297 | 88.571 | 80.984 | 1.00 | 23.94 | C |
| ATOM | 11443 | N | ILE | D | 200 | 9.611 | 84.541 | 83.524 | 1.00 | 19.23 | N |
| ATOM | 11444 | CA | ILE | D | 200 | 10.034 | 83.567 | 84.493 | 1.00 | 20.24 | C |
| ATOM | 11445 | C | ILE | D | 200 | 11.026 | 84.366 | 85.337 | 1.00 | 20.52 | C |
| ATOM | 11446 | O | ILE | D | 200 | 11.463 | 85.450 | 84.925 | 1.00 | 21.16 | O |
| ATOM | 11447 | CB | ILE | D | 200 | 10.654 | 82.280 | 83.840 | 1.00 | 20.71 | C |
| ATOM | 11448 | CG1 | ILE | D | 200 | 11.460 | 82.555 | 82.561 | 1.00 | 20.40 | C |
| ATOM | 11449 | CG2 | ILE | D | 200 | 9.527 | 81.357 | 83.482 | 1.00 | 21.93 | C |
| ATOM | 11450 | CD1 | ILE | D | 200 | 12.756 | 83.211 | 82.750 | 1.00 | 21.54 | C |
| ATOM | 11451 | N | PRO | D | 201 | 11.358 | 83.883 | 86.520 | 1.00 | 19.65 | N |
| ATOM | 11452 | CA | PRO | D | 201 | 12.300 | 84.631 | 87.367 | 1.00 | 20.86 | C |
| ATOM | 11453 | C | PRO | D | 201 | 13.638 | 84.896 | 86.715 | 1.00 | 20.98 | C |
| ATOM | 11454 | O | PRO | D | 201 | 14.108 | 84.112 | 85.914 | 1.00 | 19.80 | O |
| ATOM | 11455 | CB | PRO | D | 201 | 12.446 | 83.745 | 88.594 | 1.00 | 20.14 | C |
| ATOM | 11456 | CG | PRO | D | 201 | 11.134 | 82.958 | 88.609 | 1.00 | 22.19 | C |
| ATOM | 11457 | CD | PRO | D | 201 | 10.965 | 82.619 | 87.157 | 1.00 | 20.36 | C |
| ATOM | 11458 | N | THR | D | 202 | 14.275 | 85.997 | 87.106 | 1.00 | 20.98 | N |
| ATOM | 11459 | CA | THR | D | 202 | 15.583 | 86.365 | 86.575 | 1.00 | 20.09 | C |
| ATOM | 11460 | C | THR | D | 202 | 16.593 | 85.217 | 86.670 | 1.00 | 20.37 | C |
| ATOM | 11461 | O | THR | D | 202 | 17.313 | 84.928 | 85.704 | 1.00 | 18.58 | O |
| ATOM | 11462 | CB | THR | D | 202 | 16.130 | 87.616 | 87.359 | 1.00 | 21.04 | C |
| ATOM | 11463 | OG1 | THR | D | 202 | 15.350 | 88.758 | 87.002 | 1.00 | 22.11 | O |
| ATOM | 11464 | CG2 | THR | D | 202 | 17.550 | 87.911 | 87.004 | 1.00 | 19.78 | C |
| ATOM | 11465 | N | GLN | D | 203 | 16.652 | 84.558 | 87.823 | 1.00 | 20.11 | N |
| ATOM | 11466 | CA | GLN | D | 203 | 17.613 | 83.460 | 88.004 | 1.00 | 19.79 | C |
| ATOM | 11467 | C | GLN | D | 203 | 17.277 | 82.291 | 87.069 | 1.00 | 19.42 | C |
| ATOM | 11468 | O | GLN | D | 203 | 18.159 | 81.577 | 86.632 | 1.00 | 17.51 | O |
| ATOM | 11469 | CB | GLN | D | 203 | 17.612 | 82.953 | 89.459 | 1.00 | 22.23 | C |
| ATOM | 11470 | CG | GLN | D | 203 | 18.744 | 81.995 | 89.815 | 1.00 | 22.77 | C |
| ATOM | 11471 | CD | GLN | D | 203 | 20.103 | 82.550 | 89.436 | 1.00 | 24.75 | C |
| ATOM | 11472 | OE1 | GLN | D | 203 | 20.334 | 83.753 | 89.516 | 1.00 | 24.99 | O |
| ATOM | 11473 | NE2 | GLN | D | 203 | 21.010 | 81.679 | 89.029 | 1.00 | 26.14 | N |
| ATOM | 11474 | N | GLN | D | 204 | 16.000 | 82.095 | 86.774 | 1.00 | 18.57 | N |
| ATOM | 11475 | CA | GLN | D | 204 | 15.667 | 80.992 | 85.898 | 1.00 | 19.26 | C |
| ATOM | 11476 | C | GLN | D | 204 | 16.228 | 81.264 | 84.510 | 1.00 | 20.50 | C |
| ATOM | 11477 | O | GLN | D | 204 | 16.711 | 80.351 | 83.834 | 1.00 | 20.83 | O |
| ATOM | 11478 | CB | GLN | D | 204 | 14.143 | 80.789 | 85.855 | 1.00 | 20.38 | C |
| ATOM | 11479 | CG | GLN | D | 204 | 13.721 | 79.603 | 85.006 | 1.00 | 22.21 | C |
| ATOM | 11480 | CD | GLN | D | 204 | 12.252 | 79.209 | 85.195 | 1.00 | 19.76 | C |
| ATOM | 11481 | OE1 | GLN | D | 204 | 11.670 | 79.414 | 86.252 | 1.00 | 20.67 | O |
| ATOM | 11482 | NE2 | GLN | D | 204 | 11.672 | 78.608 | 84.167 | 1.00 | 17.66 | N |
| ATOM | 11483 | N | HIS | D | 205 | 16.191 | 82.507 | 84.056 | 1.00 | 18.39 | N |
| ATOM | 11484 | CA | HIS | D | 205 | 16.730 | 82.729 | 82.750 | 1.00 | 19.72 | C |
| ATOM | 11485 | C | HIS | D | 205 | 18.247 | 82.614 | 82.771 | 1.00 | 19.41 | C |
| ATOM | 11486 | O | HIS | D | 205 | 18.825 | 82.208 | 81.778 | 1.00 | 19.67 | O |
| ATOM | 11487 | CB | HIS | D | 205 | 16.296 | 84.067 | 82.135 | 1.00 | 20.18 | C |
| ATOM | 11488 | CG | HIS | D | 205 | 16.541 | 84.121 | 80.657 | 1.00 | 22.22 | C |
| ATOM | 11489 | ND1 | HIS | D | 205 | 16.062 | 83.156 | 79.800 | 1.00 | 21.45 | N |
| ATOM | 11490 | CD2 | HIS | D | 205 | 17.257 | 84.978 | 79.890 | 1.00 | 21.83 | C |
| ATOM | 11491 | CE1 | HIS | D | 205 | 16.471 | 83.409 | 78.569 | 1.00 | 21.22 | C |
| ATOM | 11492 | NE2 | HIS | D | 205 | 17.199 | 84.510 | 78.594 | 1.00 | 22.68 | N |
| ATOM | 11493 | N | ILE | D | 206 | 18.897 | 82.982 | 83.880 | 1.00 | 19.63 | N |
| ATOM | 11494 | CA | ILE | D | 206 | 20.361 | 82.797 | 83.974 | 1.00 | 19.97 | C |
| ATOM | 11495 | C | ILE | D | 206 | 20.670 | 81.300 | 83.878 | 1.00 | 20.55 | C |
| ATOM | 11496 | O | ILE | D | 206 | 21.707 | 80.875 | 83.331 | 1.00 | 20.70 | O |
| ATOM | 11497 | CB | ILE | D | 206 | 20.944 | 83.364 | 85.310 | 1.00 | 21.27 | C |
| ATOM | 11498 | CG1 | ILE | D | 206 | 20.977 | 84.880 | 85.232 | 1.00 | 22.77 | C |
| ATOM | 11499 | CG2 | ILE | D | 206 | 22.358 | 82.838 | 85.539 | 1.00 | 19.68 | C |
| ATOM | 11500 | CD1 | ILE | D | 206 | 21.287 | 85.599 | 86.574 | 1.00 | 21.68 | C |
| ATOM | 11501 | N | ARG | D | 207 | 19.760 | 80.487 | 84.385 | 1.00 | 18.88 | N |
| ATOM | 11502 | CA | ARG | D | 207 | 19.963 | 79.042 | 84.289 | 1.00 | 19.34 | C |
| ATOM | 11503 | C | ARG | D | 207 | 19.864 | 78.679 | 82.796 | 1.00 | 18.24 | C |
| ATOM | 11504 | O | ARG | D | 207 | 20.655 | 77.875 | 82.307 | 1.00 | 19.71 | O |
| ATOM | 11505 | CB | ARG | D | 207 | 18.898 | 78.281 | 85.101 | 1.00 | 21.31 | C |
| ATOM | 11506 | CG | ARG | D | 207 | 19.208 | 78.170 | 86.610 | 1.00 | 26.36 | C |
| ATOM | 11507 | CD | ARG | D | 207 | 18.419 | 77.015 | 87.294 | 1.00 | 26.70 | C |
| ATOM | 11508 | NE | ARG | D | 207 | 16.962 | 77.155 | 87.205 | 1.00 | 28.76 | N |
| ATOM | 11509 | CZ | ARG | D | 207 | 16.238 | 78.044 | 87.888 | 1.00 | 31.97 | C |
| ATOM | 11510 | NH1 | ARG | D | 207 | 16.838 | 78.900 | 88.727 | 1.00 | 31.93 | N |
| ATOM | 11511 | NH2 | ARG | D | 207 | 14.906 | 78.056 | 87.759 | 1.00 | 28.29 | N |
| ATOM | 11512 | N | THR | D | 208 | 18.910 | 79.281 | 82.074 | 1.00 | 16.16 | N |
| ATOM | 11513 | CA | THR | D | 208 | 18.782 | 79.005 | 80.645 | 1.00 | 17.07 | C |

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|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11514 | C   | THR D 208 | 20.072 | 79.412 | 79.898 | 1.00 | 17.69 | C |
| ATOM | 11515 | O   | THR D 208 | 20.625 | 78.629 | 79.131 | 1.00 | 15.57 | O |
| ATOM | 11516 | CB  | THR D 208 | 17.587 | 79.738 | 80.049 | 1.00 | 18.85 | C |
| ATOM | 11517 | OG1 | THR D 208 | 16.376 | 79.142 | 80.541 | 1.00 | 18.61 | O |
| ATOM | 11518 | CG2 | THR D 208 | 17.595 | 79.657 | 78.531 | 1.00 | 17.02 | C |
| ATOM | 11519 | N   | LEU D 209 | 20.577 | 80.620 | 80.151 | 1.00 | 16.37 | N |
| ATOM | 11520 | CA  | LEU D 209 | 21.803 | 81.072 | 79.469 | 1.00 | 16.91 | C |
| ATOM | 11521 | C   | LEU D 209 | 22.996 | 80.198 | 79.834 | 1.00 | 16.21 | C |
| ATOM | 11522 | O   | LEU D 209 | 23.853 | 79.929 | 79.011 | 1.00 | 17.23 | O |
| ATOM | 11523 | CB  | LEU D 209 | 22.055 | 82.552 | 79.810 | 1.00 | 16.72 | C |
| ATOM | 11524 | CG  | LEU D 209 | 20.905 | 83.441 | 79.338 | 1.00 | 14.88 | C |
| ATOM | 11525 | CD1 | LEU D 209 | 21.102 | 84.866 | 79.984 | 1.00 | 15.74 | C |
| ATOM | 11526 | CD2 | LEU D 209 | 20.862 | 83.558 | 77.818 | 1.00 | 15.10 | C |
| ATOM | 11527 | N   | THR D 210 | 23.035 | 79.724 | 81.065 | 1.00 | 16.23 | N |
| ATOM | 11528 | CA  | THR D 210 | 24.106 | 78.859 | 81.526 | 1.00 | 16.96 | C |
| ATOM | 11529 | C   | THR D 210 | 24.029 | 77.538 | 80.778 | 1.00 | 17.97 | C |
| ATOM | 11530 | O   | THR D 210 | 25.033 | 76.994 | 80.325 | 1.00 | 18.07 | O |
| ATOM | 11531 | CB  | THR D 210 | 23.950 | 78.591 | 83.013 | 1.00 | 19.11 | C |
| ATOM | 11532 | OG1 | THR D 210 | 24.294 | 79.778 | 83.732 | 1.00 | 20.83 | O |
| ATOM | 11533 | CG2 | THR D 210 | 24.889 | 77.453 | 83.472 | 1.00 | 18.44 | C |
| ATOM | 11534 | N   | SER D 211 | 22.825 | 77.002 | 80.683 | 1.00 | 15.92 | N |
| ATOM | 11535 | CA  | SER D 211 | 22.639 | 75.745 | 79.940 | 1.00 | 15.37 | C |
| ATOM | 11536 | C   | SER D 211 | 23.034 | 75.903 | 78.464 | 1.00 | 14.62 | C |
| ATOM | 11537 | O   | SER D 211 | 23.658 | 75.030 | 77.905 | 1.00 | 14.79 | O |
| ATOM | 11538 | CB  | SER D 211 | 21.168 | 75.293 | 80.013 | 1.00 | 15.69 | C |
| ATOM | 11539 | OG  | SER D 211 | 21.025 | 74.003 | 79.406 | 1.00 | 19.25 | O |
| ATOM | 11540 | N   | ALA D 212 | 22.644 | 77.004 | 77.834 | 1.00 | 17.21 | N |
| ATOM | 11541 | CA  | ALA D 212 | 22.970 | 77.212 | 76.415 | 1.00 | 17.38 | C |
| ATOM | 11542 | C   | ALA D 212 | 24.491 | 77.268 | 76.269 | 1.00 | 19.21 | C |
| ATOM | 11543 | O   | ALA D 212 | 25.053 | 76.705 | 75.330 | 1.00 | 17.56 | O |
| ATOM | 11544 | CB  | ALA D 212 | 22.314 | 78.475 | 75.888 | 1.00 | 16.84 | C |
| ATOM | 11545 | N   | ARG D 213 | 25.167 | 77.914 | 77.226 | 1.00 | 19.11 | N |
| ATOM | 11546 | CA  | ARG D 213 | 26.639 | 77.977 | 77.164 | 1.00 | 19.41 | C |
| ATOM | 11547 | C   | ARG D 213 | 27.284 | 76.616 | 77.389 | 1.00 | 17.76 | C |
| ATOM | 11548 | O   | ARG D 213 | 28.196 | 76.237 | 76.690 | 1.00 | 19.00 | O |
| ATOM | 11549 | CB  | ARG D 213 | 27.192 | 78.955 | 78.201 | 1.00 | 21.22 | C |
| ATOM | 11550 | CG  | ARG D 213 | 28.715 | 79.099 | 78.117 | 1.00 | 22.31 | C |
| ATOM | 11551 | CD  | ARG D 213 | 29.127 | 79.890 | 76.885 | 1.00 | 25.13 | C |
| ATOM | 11552 | NE  | ARG D 213 | 28.897 | 81.308 | 77.117 | 1.00 | 26.06 | N |
| ATOM | 11553 | CZ  | ARG D 213 | 28.855 | 82.237 | 76.169 | 1.00 | 30.12 | C |
| ATOM | 11554 | NH1 | ARG D 213 | 29.013 | 81.911 | 74.888 | 1.00 | 28.92 | N |
| ATOM | 11555 | NH2 | ARG D 213 | 28.686 | 83.505 | 76.511 | 1.00 | 29.39 | N |
| ATOM | 11556 | N   | LEU D 214 | 26.809 | 75.888 | 78.389 | 1.00 | 18.29 | N |
| ATOM | 11557 | CA  | LEU D 214 | 27.309 | 74.575 | 78.708 | 1.00 | 17.23 | C |
| ATOM | 11558 | C   | LEU D 214 | 27.219 | 73.644 | 77.490 | 1.00 | 18.56 | C |
| ATOM | 11559 | O   | LEU D 214 | 28.130 | 72.854 | 77.260 | 1.00 | 16.35 | O |
| ATOM | 11560 | CB  | LEU D 214 | 26.485 | 73.906 | 79.847 | 1.00 | 15.42 | C |
| ATOM | 11561 | CG  | LEU D 214 | 26.928 | 72.466 | 80.171 | 1.00 | 16.00 | C |
| ATOM | 11562 | CD1 | LEU D 214 | 28.379 | 72.511 | 80.679 | 1.00 | 17.26 | C |
| ATOM | 11563 | CD2 | LEU D 214 | 25.994 | 71.764 | 81.258 | 1.00 | 14.55 | C |
| ATOM | 11564 | N   | ALA D 215 | 26.116 | 73.694 | 76.742 | 1.00 | 18.75 | N |
| ATOM | 11565 | CA  | ALA D 215 | 25.988 | 72.765 | 75.585 | 1.00 | 19.65 | C |
| ATOM | 11566 | C   | ALA D 215 | 27.036 | 73.104 | 74.524 | 1.00 | 19.46 | C |
| ATOM | 11567 | O   | ALA D 215 | 27.619 | 72.231 | 73.906 | 1.00 | 19.46 | O |
| ATOM | 11568 | CB  | ALA D 215 | 24.545 | 72.846 | 74.974 | 1.00 | 17.00 | C |
| ATOM | 11569 | N   | ALA D 216 | 27.269 | 74.382 | 74.329 | 1.00 | 18.84 | N |
| ATOM | 11570 | CA  | ALA D 216 | 28.261 | 74.824 | 73.343 | 1.00 | 19.46 | C |
| ATOM | 11571 | C   | ALA D 216 | 29.669 | 74.395 | 73.798 | 1.00 | 20.38 | C |
| ATOM | 11572 | O   | ALA D 216 | 30.454 | 73.889 | 72.990 | 1.00 | 21.47 | O |
| ATOM | 11573 | CB  | ALA D 216 | 28.165 | 76.313 | 73.180 | 1.00 | 19.03 | C |
| ATOM | 11574 | N   | ASP D 217 | 29.981 | 74.561 | 75.087 | 1.00 | 22.01 | N |
| ATOM | 11575 | CA  | ASP D 217 | 31.281 | 74.098 | 75.596 | 1.00 | 20.01 | C |
| ATOM | 11576 | C   | ASP D 217 | 31.430 | 72.584 | 75.447 | 1.00 | 21.02 | C |
| ATOM | 11577 | O   | ASP D 217 | 32.491 | 72.089 | 75.062 | 1.00 | 20.30 | O |
| ATOM | 11578 | CB  | ASP D 217 | 31.488 | 74.469 | 77.084 | 1.00 | 22.17 | C |
| ATOM | 11579 | CG  | ASP D 217 | 31.595 | 75.969 | 77.310 | 1.00 | 23.08 | C |
| ATOM | 11580 | OD1 | ASP D 217 | 31.945 | 76.718 | 76.379 | 1.00 | 23.52 | O |
| ATOM | 11581 | OD2 | ASP D 217 | 31.320 | 76.425 | 78.447 | 1.00 | 26.87 | O |
| ATOM | 11582 | N   | VAL D 218 | 30.382 | 71.822 | 75.760 | 1.00 | 19.59 | N |
| ATOM | 11583 | CA  | VAL D 218 | 30.466 | 70.382 | 75.641 | 1.00 | 19.04 | C |
| ATOM | 11584 | C   | VAL D 218 | 30.694 | 69.997 | 74.192 | 1.00 | 19.34 | C |
| ATOM | 11585 | O   | VAL D 218 | 31.468 | 69.074 | 73.921 | 1.00 | 20.85 | O |
| ATOM | 11586 | CB  | VAL D 218 | 29.182 | 69.696 | 76.249 | 1.00 | 19.76 | C |
| ATOM | 11587 | CG1 | VAL D 218 | 29.089 | 68.233 | 75.831 | 1.00 | 19.03 | C |
| ATOM | 11588 | CG2 | VAL D 218 | 29.259 | 69.748 | 77.808 | 1.00 | 17.78 | C |
| ATOM | 11589 | N   | ALA D 219 | 30.059 | 70.722 | 73.267 | 1.00 | 20.17 | N |
| ATOM | 11590 | CA  | ALA D 219 | 30.233 | 70.443 | 71.841 | 1.00 | 22.02 | C |
| ATOM | 11591 | C   | ALA D 219 | 31.558 | 71.042 | 71.346 | 1.00 | 24.04 | C |
| ATOM | 11592 | O   | ALA D 219 | 31.980 | 70.767 | 70.229 | 1.00 | 25.20 | O |
| ATOM | 11593 | CB  | ALA D 219 | 29.070 | 70.999 | 71.045 | 1.00 | 20.19 | C |

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ATOM   11594  N    ASP D 220     32.193  71.870  72.177  1.00 25.00           N
ATOM   11595  CA   ASP D 220     33.481  72.480  71.829  1.00 25.56           C
ATOM   11596  C    ASP D 220     33.479  73.533  70.719  1.00 24.51           C
ATOM   11597  O    ASP D 220     34.376  73.552  69.894  1.00 25.77           O
ATOM   11598  CB   ASP D 220     34.494  71.376  71.493  1.00 27.54           C
ATOM   11599  CG   ASP D 220     35.942  71.902  71.389  1.00 31.12           C
ATOM   11600  OD1  ASP D 220     36.279  72.887  72.082  1.00 31.66           O
ATOM   11601  OD2  ASP D 220     36.737  71.312  70.622  1.00 32.55           O
ATOM   11602  N    VAL D 221     32.458  74.379  70.671  1.00 24.74           N
ATOM   11603  CA   VAL D 221     32.393  75.458  69.703  1.00 24.80           C
ATOM   11604  C    VAL D 221     31.981  76.760  70.405  1.00 25.01           C
ATOM   11605  O    VAL D 221     31.172  76.766  71.322  1.00 24.94           O
ATOM   11606  CB   VAL D 221     31.398  75.165  68.542  1.00 26.70           C
ATOM   11607  CG1  VAL D 221     31.816  73.872  67.795  1.00 25.33           C
ATOM   11608  CG2  VAL D 221     29.999  75.018  69.110  1.00 24.81           C
ATOM   11609  N    PRO D 222     32.538  77.896  69.954  1.00 25.07           N
ATOM   11610  CA   PRO D 222     32.318  79.252  70.471  1.00 24.83           C
ATOM   11611  C    PRO D 222     31.006  79.927  70.113  1.00 23.31           C
ATOM   11612  O    PRO D 222     30.966  81.109  69.839  1.00 25.04           O
ATOM   11613  CB   PRO D 222     33.526  80.002  69.908  1.00 26.04           C
ATOM   11614  CG   PRO D 222     33.578  79.419  68.515  1.00 23.56           C
ATOM   11615  CD   PRO D 222     33.497  77.925  68.831  1.00 24.96           C
ATOM   11616  N    THR D 223     29.903  79.186  70.149  1.00 22.25           N
ATOM   11617  CA   THR D 223     28.621  79.772  69.794  1.00 20.78           C
ATOM   11618  C    THR D 223     28.335  81.141  70.422  1.00 20.97           C
ATOM   11619  O    THR D 223     28.643  81.418  71.612  1.00 22.54           O
ATOM   11620  CB   THR D 223     27.454  78.818  70.194  1.00 18.08           C
ATOM   11621  OG1  THR D 223     27.807  77.477  69.847  1.00 19.74           O
ATOM   11622  CG2  THR D 223     26.160  79.251  69.531  1.00 19.67           C
ATOM   11623  N    VAL D 224     27.687  82.004  69.667  1.00 20.52           N
ATOM   11624  CA   VAL D 224     27.375  83.289  70.251  1.00 22.28           C
ATOM   11625  C    VAL D 224     26.043  83.121  70.997  1.00 24.55           C
ATOM   11626  O    VAL D 224     25.032  82.720  70.406  1.00 25.60           O
ATOM   11627  CB   VAL D 224     27.308  84.387  69.148  1.00 23.61           C
ATOM   11628  CG1  VAL D 224     26.860  85.681  69.717  1.00 22.10           C
ATOM   11629  CG2  VAL D 224     28.702  84.579  68.519  1.00 25.22           C
ATOM   11630  N    VAL D 225     26.051  83.373  72.305  1.00 22.32           N
ATOM   11631  CA   VAL D 225     24.846  83.249  73.100  1.00 22.58           C
ATOM   11632  C    VAL D 225     24.179  84.609  73.279  1.00 21.95           C
ATOM   11633  O    VAL D 225     24.777  85.551  73.800  1.00 23.43           O
ATOM   11634  CB   VAL D 225     25.155  82.606  74.482  1.00 21.24           C
ATOM   11635  CG1  VAL D 225     23.873  82.565  75.354  1.00 22.36           C
ATOM   11636  CG2  VAL D 225     25.720  81.199  74.297  1.00 23.63           C
ATOM   11637  N    ILE D 226     22.918  84.715  72.877  1.00 22.95           N
ATOM   11638  CA   ILE D 226     22.204  85.968  72.970  1.00 22.55           C
ATOM   11639  C    ILE D 226     21.063  85.937  73.991  1.00 23.98           C
ATOM   11640  O    ILE D 226     20.227  85.024  73.985  1.00 21.77           O
ATOM   11641  CB   ILE D 226     21.677  86.336  71.577  1.00 23.62           C
ATOM   11642  CG1  ILE D 226     22.874  86.307  70.613  1.00 22.18           C
ATOM   11643  CG2  ILE D 226     20.941  87.686  71.604  1.00 24.40           C
ATOM   11644  CD1  ILE D 226     22.505  86.343  69.120  1.00 24.85           C
ATOM   11645  N    ALA D 227     21.026  86.939  74.871  1.00 21.77           N
ATOM   11646  CA   ALA D 227     19.969  87.010  75.864  1.00 24.40           C
ATOM   11647  C    ALA D 227     18.883  88.009  75.486  1.00 24.46           C
ATOM   11648  O    ALA D 227     19.181  89.165  75.145  1.00 27.16           O
ATOM   11649  CB   ALA D 227     20.563  87.361  77.260  1.00 22.71           C
ATOM   11650  N    ARG D 228     17.622  87.588  75.554  1.00 24.27           N
ATOM   11651  CA   ARG D 228     16.512  88.478  75.221  1.00 23.03           C
ATOM   11652  C    ARG D 228     15.542  88.632  76.392  1.00 24.73           C
ATOM   11653  O    ARG D 228     15.173  87.643  77.037  1.00 24.17           O
ATOM   11654  CB   ARG D 228     15.744  87.939  73.982  1.00 24.29           C
ATOM   11655  CG   ARG D 228     14.240  88.322  73.913  1.00 23.90           C
ATOM   11656  CD   ARG D 228     13.481  87.802  72.668  1.00 24.22           C
ATOM   11657  NE   ARG D 228     12.036  87.907  72.882  1.00 23.19           N
ATOM   11658  CZ   ARG D 228     11.088  87.596  72.005  1.00 22.92           C
ATOM   11659  NH1  ARG D 228     11.400  87.139  70.798  1.00 24.79           N
ATOM   11660  NH2  ARG D 228      9.801  87.747  72.342  1.00 23.91           N
ATOM   11661  N    THR D 229     15.123  89.861  76.681  1.00 21.46           N
ATOM   11662  CA   THR D 229     14.169  90.020  77.753  1.00 22.95           C
ATOM   11663  C    THR D 229     12.861  90.521  77.191  1.00 22.35           C
ATOM   11664  O    THR D 229     12.852  91.342  76.287  1.00 23.81           O
ATOM   11665  CB   THR D 229     14.663  91.001  78.852  1.00 22.79           C
ATOM   11666  OG1  THR D 229     13.706  91.025  79.906  1.00 25.23           O
ATOM   11667  CG2  THR D 229     14.831  92.440  78.280  1.00 24.68           C
ATOM   11668  N    ASP D 230     11.751  90.019  77.720  1.00 23.47           N
ATOM   11669  CA   ASP D 230     10.420  90.431  77.283  1.00 22.80           C
ATOM   11670  C    ASP D 230      9.682  91.301  78.305  1.00 24.04           C
ATOM   11671  O    ASP D 230      8.457  91.417  78.237  1.00 23.21           O
ATOM   11672  CB   ASP D 230      9.557  89.205  77.026  1.00 23.68           C
ATOM   11673  CG   ASP D 230      9.769  88.628  75.648  1.00 25.39           C
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| ATOM | 11674 | OD1 | ASP | D | 230 | 9.129 | 89.110 | 74.689 | 1.00 | 27.33 | O |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 11675 | OD2 | ASP | D | 230 | 10.593 | 87.705 | 75.513 | 1.00 | 26.95 | O |
| ATOM | 11676 | N | ALA | D | 231 | 10.420 | 91.926 | 79.218 | 1.00 | 23.68 | N |
| ATOM | 11677 | CA | ALA | D | 231 | 9.824 | 92.688 | 80.318 | 1.00 | 25.74 | C |
| ATOM | 11678 | C | ALA | D | 231 | 9.173 | 94.038 | 80.030 | 1.00 | 27.06 | C |
| ATOM | 11679 | O | ALA | D | 231 | 8.473 | 94.562 | 80.880 | 1.00 | 28.30 | O |
| ATOM | 11680 | CB | ALA | D | 231 | 10.861 | 92.855 | 81.439 | 1.00 | 24.76 | C |
| ATOM | 11681 | N | GLU | D | 232 | 9.382 | 94.587 | 78.842 | 1.00 | 28.29 | N |
| ATOM | 11682 | CA | GLU | D | 232 | 8.836 | 95.877 | 78.487 | 1.00 | 29.08 | C |
| ATOM | 11683 | C | GLU | D | 232 | 7.318 | 95.776 | 78.407 | 1.00 | 28.70 | C |
| ATOM | 11684 | O | GLU | D | 232 | 6.615 | 96.653 | 78.899 | 1.00 | 29.76 | O |
| ATOM | 11685 | CB | GLU | D | 232 | 9.462 | 96.318 | 77.158 | 1.00 | 31.87 | C |
| ATOM | 11686 | CG | GLU | D | 232 | 9.265 | 97.778 | 76.763 | 1.00 | 35.90 | C |
| ATOM | 11687 | CD | GLU | D | 232 | 7.871 | 98.048 | 76.214 | 1.00 | 39.01 | C |
| ATOM | 11688 | OE1 | GLU | D | 232 | 7.468 | 97.392 | 75.217 | 1.00 | 38.72 | O |
| ATOM | 11689 | OE2 | GLU | D | 232 | 7.173 | 98.920 | 76.787 | 1.00 | 39.60 | O |
| ATOM | 11690 | N | ALA | D | 233 | 6.799 | 94.688 | 77.829 | 1.00 | 27.34 | N |
| ATOM | 11691 | CA | ALA | D | 233 | 5.350 | 94.523 | 77.686 | 1.00 | 26.29 | C |
| ATOM | 11692 | C | ALA | D | 233 | 4.725 | 93.538 | 78.649 | 1.00 | 26.37 | C |
| ATOM | 11693 | O | ALA | D | 233 | 3.554 | 93.659 | 79.015 | 1.00 | 28.18 | O |
| ATOM | 11694 | CB | ALA | D | 233 | 5.017 | 94.135 | 76.254 | 1.00 | 25.53 | C |
| ATOM | 11695 | N | ALA | D | 234 | 5.497 | 92.540 | 79.085 | 1.00 | 25.99 | N |
| ATOM | 11696 | CA | ALA | D | 234 | 4.941 | 91.528 | 79.982 | 1.00 | 25.37 | C |
| ATOM | 11697 | C | ALA | D | 234 | 4.425 | 92.066 | 81.319 | 1.00 | 27.21 | C |
| ATOM | 11698 | O | ALA | D | 234 | 5.123 | 92.797 | 82.026 | 1.00 | 27.97 | O |
| ATOM | 11699 | CB | ALA | D | 234 | 5.971 | 90.416 | 80.207 | 1.00 | 25.91 | C |
| ATOM | 11700 | N | THR | D | 235 | 3.183 | 91.722 | 81.652 | 1.00 | 26.43 | N |
| ATOM | 11701 | CA | THR | D | 235 | 2.591 | 92.158 | 82.920 | 1.00 | 28.07 | C |
| ATOM | 11702 | C | THR | D | 235 | 2.378 | 90.970 | 83.842 | 1.00 | 26.61 | C |
| ATOM | 11703 | O | THR | D | 235 | 1.696 | 91.087 | 84.865 | 1.00 | 26.69 | O |
| ATOM | 11704 | CB | THR | D | 235 | 1.219 | 92.881 | 82.671 | 1.00 | 28.67 | C |
| ATOM | 11705 | OG1 | THR | D | 235 | 0.221 | 91.932 | 82.259 | 1.00 | 30.94 | O |
| ATOM | 11706 | CG2 | THR | D | 235 | 1.378 | 93.905 | 81.570 | 1.00 | 28.78 | C |
| ATOM | 11707 | N | LEU | D | 236 | 2.956 | 89.814 | 83.479 | 1.00 | 26.25 | N |
| ATOM | 11708 | CA | LEU | D | 236 | 2.806 | 88.598 | 84.278 | 1.00 | 24.54 | C |
| ATOM | 11709 | C | LEU | D | 236 | 4.139 | 87.918 | 84.453 | 1.00 | 23.56 | C |
| ATOM | 11710 | O | LEU | D | 236 | 5.020 | 88.030 | 83.579 | 1.00 | 23.93 | O |
| ATOM | 11711 | CB | LEU | D | 236 | 1.854 | 87.607 | 83.601 | 1.00 | 26.40 | C |
| ATOM | 11712 | CG | LEU | D | 236 | 0.393 | 88.025 | 83.430 | 1.00 | 26.87 | C |
| ATOM | 11713 | CD1 | LEU | D | 236 | -0.351 | 86.996 | 82.596 | 1.00 | 27.29 | C |
| ATOM | 11714 | CD2 | LEU | D | 236 | -0.242 | 88.135 | 84.800 | 1.00 | 27.68 | C |
| ATOM | 11715 | N | ILE | D | 237 | 4.279 | 87.249 | 85.597 | 1.00 | 23.44 | N |
| ATOM | 11716 | CA | ILE | D | 237 | 5.487 | 86.501 | 85.960 | 1.00 | 21.83 | C |
| ATOM | 11717 | C | ILE | D | 237 | 5.047 | 85.249 | 86.731 | 1.00 | 21.62 | C |
| ATOM | 11718 | O | ILE | D | 237 | 4.035 | 85.238 | 87.468 | 1.00 | 22.26 | O |
| ATOM | 11719 | CB | ILE | D | 237 | 6.477 | 87.391 | 86.793 | 1.00 | 23.57 | C |
| ATOM | 11720 | CG1 | ILE | D | 237 | 7.803 | 86.648 | 86.997 | 1.00 | 22.33 | C |
| ATOM | 11721 | CG2 | ILE | D | 237 | 5.805 | 87.829 | 88.086 | 1.00 | 20.09 | C |
| ATOM | 11722 | CD1 | ILE | D | 237 | 8.960 | 87.485 | 87.576 | 1.00 | 23.04 | C |
| ATOM | 11723 | N | THR | D | 238 | 5.793 | 84.158 | 86.551 | 1.00 | 20.53 | N |
| ATOM | 11724 | CA | THR | D | 238 | 5.404 | 82.944 | 87.192 | 1.00 | 20.67 | C |
| ATOM | 11725 | C | THR | D | 238 | 5.543 | 82.958 | 88.697 | 1.00 | 21.37 | C |
| ATOM | 11726 | O | THR | D | 238 | 4.741 | 82.345 | 89.381 | 1.00 | 22.16 | O |
| ATOM | 11727 | CB | THR | D | 238 | 6.218 | 81.761 | 86.640 | 1.00 | 19.04 | C |
| ATOM | 11728 | OG1 | THR | D | 238 | 7.606 | 82.056 | 86.822 | 1.00 | 18.87 | O |
| ATOM | 11729 | CG2 | THR | D | 238 | 5.955 | 81.561 | 85.127 | 1.00 | 19.89 | C |
| ATOM | 11730 | N | SER | D | 239 | 6.547 | 83.662 | 89.211 | 1.00 | 22.43 | N |
| ATOM | 11731 | CA | SER | D | 239 | 6.821 | 83.669 | 90.652 | 1.00 | 24.54 | C |
| ATOM | 11732 | C | SER | D | 239 | 7.555 | 84.908 | 91.125 | 1.00 | 25.04 | C |
| ATOM | 11733 | O | SER | D | 239 | 8.272 | 85.545 | 90.352 | 1.00 | 25.90 | O |
| ATOM | 11734 | CB | SER | D | 239 | 7.695 | 82.452 | 91.017 | 1.00 | 22.93 | C |
| ATOM | 11735 | OG | SER | D | 239 | 7.972 | 82.355 | 92.414 | 1.00 | 27.68 | O |
| ATOM | 11736 | N | ASP | D | 240 | 7.401 | 85.204 | 92.416 | 1.00 | 25.20 | N |
| ATOM | 11737 | CA | ASP | D | 240 | 8.060 | 86.357 | 93.033 | 1.00 | 26.36 | C |
| ATOM | 11738 | C | ASP | D | 240 | 9.227 | 85.870 | 93.884 | 1.00 | 25.04 | C |
| ATOM | 11739 | O | ASP | D | 240 | 9.693 | 86.565 | 94.792 | 1.00 | 24.59 | O |
| ATOM | 11740 | CB | ASP | D | 240 | 7.060 | 87.120 | 93.909 | 1.00 | 27.72 | C |
| ATOM | 11741 | CG | ASP | D | 240 | 6.622 | 86.337 | 95.134 | 1.00 | 29.07 | C |
| ATOM | 11742 | OD1 | ASP | D | 240 | 6.736 | 85.085 | 95.182 | 1.00 | 28.02 | O |
| ATOM | 11743 | OD2 | ASP | D | 240 | 6.136 | 86.998 | 96.073 | 1.00 | 32.80 | O |
| ATOM | 11744 | N | VAL | D | 241 | 9.695 | 84.667 | 93.578 | 1.00 | 26.57 | N |
| ATOM | 11745 | CA | VAL | D | 241 | 10.785 | 84.068 | 94.328 | 1.00 | 25.90 | C |
| ATOM | 11746 | C | VAL | D | 241 | 12.119 | 84.816 | 94.247 | 1.00 | 25.46 | C |
| ATOM | 11747 | O | VAL | D | 241 | 12.874 | 84.811 | 95.224 | 1.00 | 26.01 | O |
| ATOM | 11748 | CB | VAL | D | 241 | 11.035 | 82.592 | 93.882 | 1.00 | 25.86 | C |
| ATOM | 11749 | CG1 | VAL | D | 241 | 11.492 | 82.552 | 92.437 | 1.00 | 24.79 | C |
| ATOM | 11750 | CG2 | VAL | D | 241 | 12.066 | 81.954 | 94.786 | 1.00 | 25.07 | C |
| ATOM | 11751 | N | ASP | D | 242 | 12.410 | 85.450 | 93.111 | 1.00 | 24.05 | N |
| ATOM | 11752 | CA | ASP | D | 242 | 13.687 | 86.160 | 92.930 | 1.00 | 24.94 | C |
| ATOM | 11753 | C | ASP | D | 242 | 13.612 | 87.593 | 93.466 | 1.00 | 25.96 | C |

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ATOM   11754  O   ASP D 242      12.735  88.375  93.086  1.00 23.48           O
ATOM   11755  CB  ASP D 242      14.085  86.167  91.441  1.00 23.69           C
ATOM   11756  CG  ASP D 242      15.555  86.506  91.208  1.00 24.51           C
ATOM   11757  OD1 ASP D 242      16.057  87.476  91.818  1.00 25.05           O
ATOM   11758  OD2 ASP D 242      16.225  85.825  90.394  1.00 24.09           O
ATOM   11759  N   GLU D 243      14.569  87.937  94.324  1.00 27.04           N
ATOM   11760  CA  GLU D 243      14.589  89.264  94.922  1.00 29.00           C
ATOM   11761  C   GLU D 243      14.768  90.379  93.921  1.00 27.89           C
ATOM   11762  O   GLU D 243      14.321  91.506  94.148  1.00 27.59           O
ATOM   11763  CB  GLU D 243      15.657  89.304  96.029  1.00 32.04           C
ATOM   11764  CG  GLU D 243      15.106  88.665  97.300  1.00 36.56           C
ATOM   11765  CD  GLU D 243      16.080  88.623  98.469  1.00 40.98           C
ATOM   11766  OE1 GLU D 243      16.916  89.549  98.584  1.00 42.09           O
ATOM   11767  OE2 GLU D 243      15.984  87.665  99.282  1.00 41.90           O
ATOM   11768  N   ARG D 244      15.383  90.076  92.786  1.00 27.00           N
ATOM   11769  CA  ARG D 244      15.566  91.125  91.775  1.00 27.35           C
ATOM   11770  C   ARG D 244      14.264  91.450  91.036  1.00 26.91           C
ATOM   11771  O   ARG D 244      14.147  92.497  90.396  1.00 26.44           O
ATOM   11772  CB  ARG D 244      16.650  90.710  90.774  1.00 27.88           C
ATOM   11773  CG  ARG D 244      17.983  90.487  91.430  1.00 25.77           C
ATOM   11774  CD  ARG D 244      18.943  89.732  90.540  1.00 27.91           C
ATOM   11775  NE  ARG D 244      18.597  88.313  90.462  1.00 27.07           N
ATOM   11776  CZ  ARG D 244      19.449  87.361  90.103  1.00 27.22           C
ATOM   11777  NH1 ARG D 244      20.699  87.675  89.784  1.00 25.25           N
ATOM   11778  NH2 ARG D 244      19.045  86.087  90.084  1.00 27.83           N
ATOM   11779  N   ASP D 245      13.282  90.555  91.134  1.00 25.73           N
ATOM   11780  CA  ASP D 245      12.001  90.746  90.458  1.00 24.72           C
ATOM   11781  C   ASP D 245      10.906  91.336  91.363  1.00 23.44           C
ATOM   11782  O   ASP D 245       9.955  91.974  90.900  1.00 24.88           O
ATOM   11783  CB  ASP D 245      11.524  89.404  89.876  1.00 24.57           C
ATOM   11784  CG  ASP D 245      12.524  88.791  88.908  1.00 23.83           C
ATOM   11785  OD1 ASP D 245      13.185  89.540  88.153  1.00 25.66           O
ATOM   11786  OD2 ASP D 245      12.666  87.536  88.886  1.00 25.14           O
ATOM   11787  N   GLN D 246      11.052  91.116  92.654  1.00 23.51           N
ATOM   11788  CA  GLN D 246      10.106  91.579  93.644  1.00 24.93           C
ATOM   11789  C   GLN D 246       9.786  93.076  93.591  1.00 26.61           C
ATOM   11790  O   GLN D 246       8.659  93.479  93.879  1.00 26.09           O
ATOM   11791  CB  GLN D 246      10.623  91.225  95.028  1.00 26.10           C
ATOM   11792  CG  GLN D 246      10.400  89.773  95.371  1.00 27.47           C
ATOM   11793  CD  GLN D 246      11.247  89.309  96.523  1.00 28.73           C
ATOM   11794  OE1 GLN D 246      11.660  90.109  97.374  1.00 29.75           O
ATOM   11795  NE2 GLN D 246      11.510  88.008  96.571  1.00 27.81           N
ATOM   11796  N   PRO D 247      10.760  93.916  93.236  1.00 27.08           N
ATOM   11797  CA  PRO D 247      10.360  95.330  93.219  1.00 29.18           C
ATOM   11798  C   PRO D 247       9.271  95.660  92.222  1.00 29.55           C
ATOM   11799  O   PRO D 247       8.615  96.699  92.333  1.00 31.37           O
ATOM   11800  CB  PRO D 247      11.661  96.065  92.886  1.00 29.45           C
ATOM   11801  CG  PRO D 247      12.719  95.191  93.462  1.00 28.21           C
ATOM   11802  CD  PRO D 247      12.226  93.785  93.097  1.00 29.04           C
ATOM   11803  N   PHE D 248       9.049  94.774  91.259  1.00 30.00           N
ATOM   11804  CA  PHE D 248       8.059  95.052  90.234  1.00 28.89           C
ATOM   11805  C   PHE D 248       6.776  94.300  90.455  1.00 29.16           C
ATOM   11806  O   PHE D 248       5.783  94.546  89.772  1.00 30.15           O
ATOM   11807  CB  PHE D 248       8.651  94.710  88.869  1.00 28.94           C
ATOM   11808  CG  PHE D 248       9.956  95.394  88.597  1.00 28.32           C
ATOM   11809  CD1 PHE D 248       9.993  96.757  88.320  1.00 29.11           C
ATOM   11810  CD2 PHE D 248      11.154  94.692  88.636  1.00 28.83           C
ATOM   11811  CE1 PHE D 248      11.199  97.402  88.086  1.00 28.27           C
ATOM   11812  CE2 PHE D 248      12.374  95.339  88.405  1.00 28.78           C
ATOM   11813  CZ  PHE D 248      12.396  96.693  88.129  1.00 28.24           C
ATOM   11814  N   ILE D 249       6.798  93.397  91.424  1.00 29.28           N
ATOM   11815  CA  ILE D 249       5.644  92.575  91.768  1.00 31.55           C
ATOM   11816  C   ILE D 249       4.573  93.425  92.443  1.00 32.63           C
ATOM   11817  O   ILE D 249       4.869  94.126  93.412  1.00 33.80           O
ATOM   11818  CB  ILE D 249       6.080  91.433  92.717  1.00 31.46           C
ATOM   11819  CG1 ILE D 249       6.945  90.438  91.946  1.00 33.46           C
ATOM   11820  CG2 ILE D 249       4.874  90.764  93.341  1.00 31.89           C
ATOM   11821  CD1 ILE D 249       6.308  89.907  90.684  1.00 32.40           C
ATOM   11822  N   THR D 250       3.340  93.354  91.948  1.00 33.48           N
ATOM   11823  CA  THR D 250       2.245  94.157  92.495  1.00 34.83           C
ATOM   11824  C   THR D 250       1.411  93.525  93.614  1.00 34.88           C
ATOM   11825  O   THR D 250       0.827  94.238  94.424  1.00 37.20           O
ATOM   11826  CB  THR D 250       1.244  94.573  91.386  1.00 36.02           C
ATOM   11827  OG1 THR D 250       0.486  93.425  90.975  1.00 37.53           O
ATOM   11828  CG2 THR D 250       1.977  95.152  90.181  1.00 35.65           C
ATOM   11829  N   GLY D 251       1.333  92.203  93.657  1.00 33.85           N
ATOM   11830  CA  GLY D 251       0.534  91.553  94.673  1.00 33.48           C
ATOM   11831  C   GLY D 251      -0.678  90.864  94.064  1.00 33.07           C
ATOM   11832  O   GLY D 251      -1.103  89.814  94.539  1.00 34.77           O
ATOM   11833  N   GLU D 252      -1.244  91.463  93.020  1.00 33.19           N
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| ATOM | 11834 | CA | GLU D 252 | -2.403 | 90.893 | 92.331 | 1.00 32.50 | C |
|------|-------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 11835 | C | GLU D 252 | -1.997 | 89.555 | 91.691 | 1.00 32.22 | C |
| ATOM | 11836 | O | GLU D 252 | -0.842 | 89.365 | 91.305 | 1.00 31.17 | O |
| ATOM | 11837 | CB | GLU D 252 | -2.893 | 91.848 | 91.241 | 1.00 34.56 | C |
| ATOM | 11838 | CG | GLU D 252 | -3.251 | 93.265 | 91.707 | 1.00 37.47 | C |
| ATOM | 11839 | CD | GLU D 252 | -4.669 | 93.376 | 92.252 | 1.00 40.62 | C |
| ATOM | 11840 | OE1 | GLU D 252 | -5.459 | 92.414 | 92.097 | 1.00 40.67 | O |
| ATOM | 11841 | OE2 | GLU D 252 | -5.001 | 94.444 | 92.818 | 1.00 41.81 | O |
| ATOM | 11842 | N | ARG D 253 | -2.970 | 88.657 | 91.547 | 1.00 31.92 | N |
| ATOM | 11843 | CA | ARG D 253 | -2.735 | 87.322 | 91.006 | 1.00 32.53 | C |
| ATOM | 11844 | C | ARG D 253 | -3.894 | 86.885 | 90.120 | 1.00 33.35 | C |
| ATOM | 11845 | O | ARG D 253 | -5.019 | 87.385 | 90.248 | 1.00 32.75 | O |
| ATOM | 11846 | CB | ARG D 253 | -2.610 | 86.341 | 92.166 | 1.00 34.09 | C |
| ATOM | 11847 | CG | ARG D 253 | -1.576 | 86.761 | 93.198 | 1.00 34.64 | C |
| ATOM | 11848 | CD | ARG D 253 | -0.217 | 86.253 | 92.808 | 1.00 36.83 | C |
| ATOM | 11849 | NE | ARG D 253 | -0.142 | 84.789 | 92.808 | 1.00 36.33 | N |
| ATOM | 11850 | CZ | ARG D 253 | -0.041 | 84.032 | 93.898 | 1.00 36.86 | C |
| ATOM | 11851 | NH1 | ARG D 253 | -0.014 | 84.580 | 95.100 | 1.00 39.30 | N |
| ATOM | 11852 | NH2 | ARG D 253 | 0.088 | 82.723 | 93.790 | 1.00 37.58 | N |
| ATOM | 11853 | N | THR D 254 | -3.617 | 85.936 | 89.230 | 1.00 32.48 | N |
| ATOM | 11854 | CA | THR D 254 | -4.617 | 85.422 | 88.312 | 1.00 32.18 | C |
| ATOM | 11855 | C | THR D 254 | -5.103 | 84.055 | 88.785 | 1.00 31.39 | C |
| ATOM | 11856 | O | THR D 254 | -4.484 | 83.430 | 89.652 | 1.00 31.37 | O |
| ATOM | 11857 | CB | THR D 254 | -4.028 | 85.284 | 86.912 | 1.00 32.19 | C |
| ATOM | 11858 | OG1 | THR D 254 | -3.046 | 84.244 | 86.920 | 1.00 33.76 | O |
| ATOM | 11859 | CG2 | THR D 254 | -3.350 | 86.561 | 86.501 | 1.00 34.05 | C |
| ATOM | 11860 | N | ARG D 255 | -6.219 | 83.591 | 88.236 | 1.00 31.82 | N |
| ATOM | 11861 | CA | ARG D 255 | -6.730 | 82.288 | 88.623 | 1.00 32.46 | C |
| ATOM | 11862 | C | ARG D 255 | -5.714 | 81.187 | 88.285 | 1.00 31.62 | C |
| ATOM | 11863 | O | ARG D 255 | -5.753 | 80.104 | 88.868 | 1.00 33.36 | O |
| ATOM | 11864 | CB | ARG D 255 | -8.094 | 82.010 | 87.951 | 1.00 36.07 | C |
| ATOM | 11865 | CG | ARG D 255 | -9.182 | 83.023 | 88.379 | 1.00 40.07 | C |
| ATOM | 11866 | CD | ARG D 255 | -10.506 | 82.954 | 87.576 | 1.00 44.88 | C |
| ATOM | 11867 | NE | ARG D 255 | -11.500 | 82.138 | 88.260 | 1.00 48.87 | N |
| ATOM | 11868 | CZ | ARG D 255 | -11.842 | 82.298 | 89.536 | 1.00 51.09 | C |
| ATOM | 11869 | NH1 | ARG D 255 | -11.280 | 83.257 | 90.272 | 1.00 52.81 | N |
| ATOM | 11870 | NH2 | ARG D 255 | -12.709 | 81.468 | 90.097 | 1.00 53.32 | N |
| ATOM | 11871 | N | GLU D 256 | -4.781 | 81.456 | 87.377 | 1.00 30.35 | N |
| ATOM | 11872 | CA | GLU D 256 | -3.790 | 80.424 | 87.032 | 1.00 30.11 | C |
| ATOM | 11873 | C | GLU D 256 | -2.700 | 80.375 | 88.091 | 1.00 29.47 | C |
| ATOM | 11874 | O | GLU D 256 | -1.949 | 79.398 | 88.183 | 1.00 28.62 | O |
| ATOM | 11875 | CB | GLU D 256 | -3.159 | 80.682 | 85.653 | 1.00 30.48 | C |
| ATOM | 11876 | CG | GLU D 256 | -4.165 | 80.657 | 84.492 | 1.00 31.26 | C |
| ATOM | 11877 | CD | GLU D 256 | -4.560 | 82.059 | 84.034 | 1.00 31.68 | C |
| ATOM | 11878 | OE1 | GLU D 256 | -4.708 | 82.955 | 84.893 | 1.00 33.04 | O |
| ATOM | 11879 | OE2 | GLU D 256 | -4.728 | 82.270 | 82.811 | 1.00 31.43 | O |
| ATOM | 11880 | N | GLY D 257 | -2.628 | 81.440 | 88.888 | 1.00 29.88 | N |
| ATOM | 11881 | CA | GLY D 257 | -1.640 | 81.531 | 89.943 | 1.00 27.85 | C |
| ATOM | 11882 | C | GLY D 257 | -0.500 | 82.447 | 89.575 | 1.00 28.74 | C |
| ATOM | 11883 | O | GLY D 257 | 0.456 | 82.615 | 90.360 | 1.00 27.83 | O |
| ATOM | 11884 | N | PHE D 258 | -0.579 | 83.043 | 88.384 | 1.00 28.69 | N |
| ATOM | 11885 | CA | PHE D 258 | 0.478 | 83.939 | 87.943 | 1.00 28.07 | C |
| ATOM | 11886 | C | PHE D 258 | 0.459 | 85.170 | 88.822 | 1.00 28.20 | C |
| ATOM | 11887 | O | PHE D 258 | -0.528 | 85.395 | 89.530 | 1.00 27.99 | O |
| ATOM | 11888 | CB | PHE D 258 | 0.284 | 84.346 | 86.476 | 1.00 29.11 | C |
| ATOM | 11889 | CG | PHE D 258 | 0.402 | 83.193 | 85.494 | 1.00 30.14 | C |
| ATOM | 11890 | CD1 | PHE D 258 | 1.258 | 82.122 | 85.753 | 1.00 30.77 | C |
| ATOM | 11891 | CD2 | PHE D 258 | -0.331 | 83.189 | 84.306 | 1.00 30.01 | C |
| ATOM | 11892 | CE1 | PHE D 258 | 1.386 | 81.051 | 84.832 | 1.00 30.13 | C |
| ATOM | 11893 | CE2 | PHE D 258 | -0.203 | 82.118 | 83.377 | 1.00 31.15 | C |
| ATOM | 11894 | CZ | PHE D 258 | 0.651 | 81.061 | 83.645 | 1.00 29.15 | C |
| ATOM | 11895 | N | TYR D 259 | 1.558 | 85.925 | 88.781 | 1.00 27.43 | N |
| ATOM | 11896 | CA | TYR D 259 | 1.725 | 87.169 | 89.527 | 1.00 26.95 | C |
| ATOM | 11897 | C | TYR D 259 | 1.770 | 88.353 | 88.571 | 1.00 27.35 | C |
| ATOM | 11898 | O | TYR D 259 | 2.504 | 88.324 | 87.571 | 1.00 26.87 | O |
| ATOM | 11899 | CB | TYR D 259 | 3.045 | 87.199 | 90.323 | 1.00 28.54 | C |
| ATOM | 11900 | CG | TYR D 259 | 3.131 | 86.235 | 91.501 | 1.00 27.83 | C |
| ATOM | 11901 | CD1 | TYR D 259 | 3.332 | 84.872 | 91.290 | 1.00 28.50 | C |
| ATOM | 11902 | CD2 | TYR D 259 | 3.005 | 86.690 | 92.825 | 1.00 27.32 | C |
| ATOM | 11903 | CE1 | TYR D 259 | 3.410 | 83.973 | 92.371 | 1.00 27.96 | C |
| ATOM | 11904 | CE2 | TYR D 259 | 3.075 | 85.802 | 93.916 | 1.00 27.71 | C |
| ATOM | 11905 | CZ | TYR D 259 | 3.282 | 84.441 | 93.673 | 1.00 27.76 | C |
| ATOM | 11906 | OH | TYR D 259 | 3.405 | 83.543 | 94.710 | 1.00 29.04 | O |
| ATOM | 11907 | N | ARG D 260 | 1.008 | 89.405 | 88.876 | 1.00 27.64 | N |
| ATOM | 11908 | CA | ARG D 260 | 1.040 | 90.606 | 88.035 | 1.00 27.68 | C |
| ATOM | 11909 | C | ARG D 260 | 2.325 | 91.329 | 88.402 | 1.00 27.24 | C |
| ATOM | 11910 | O | ARG D 260 | 2.695 | 91.340 | 89.557 | 1.00 28.25 | O |
| ATOM | 11911 | CB | ARG D 260 | -0.140 | 91.530 | 88.335 | 1.00 29.60 | C |
| ATOM | 11912 | CG | ARG D 260 | -1.522 | 90.993 | 87.946 | 1.00 30.15 | C |
| ATOM | 11913 | CD | ARG D 260 | -1.825 | 91.170 | 86.451 | 1.00 35.61 | C |

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ATOM   11914  NE   ARG D 260      -3.114  90.550  86.086  1.00 36.63           N
ATOM   11915  CZ   ARG D 260      -3.561  90.426  84.839  1.00 35.94           C
ATOM   11916  NH1  ARG D 260      -2.834  90.879  83.826  1.00 37.12           N
ATOM   11917  NH2  ARG D 260      -4.726  89.833  84.601  1.00 35.91           N
ATOM   11918  N    THR D 261       2.969  91.953  87.420  1.00 27.61           N
ATOM   11919  CA   THR D 261       4.213  92.683  87.608  1.00 28.59           C
ATOM   11920  C    THR D 261       4.166  93.982  86.791  1.00 29.45           C
ATOM   11921  O    THR D 261       3.405  94.087  85.807  1.00 30.58           O
ATOM   11922  CB   THR D 261       5.439  91.815  87.156  1.00 28.51           C
ATOM   11923  OG1  THR D 261       6.669  92.519  87.401  1.00 29.12           O
ATOM   11924  CG2  THR D 261       5.334  91.495  85.681  1.00 24.90           C
ATOM   11925  N    LYS D 262       4.988  94.957  87.183  1.00 30.08           N
ATOM   11926  CA   LYS D 262       5.037  96.250  86.511  1.00 32.02           C
ATOM   11927  C    LYS D 262       6.058  96.206  85.416  1.00 31.63           C
ATOM   11928  O    LYS D 262       7.249  96.032  85.667  1.00 33.62           O
ATOM   11929  CB   LYS D 262       5.378  97.359  87.523  1.00 34.06           C
ATOM   11930  CG   LYS D 262       4.457  97.340  88.765  1.00 37.57           C
ATOM   11931  CD   LYS D 262       4.492  98.666  89.550  1.00 39.98           C
ATOM   11932  CE   LYS D 262       3.797  98.561  90.930  1.00 41.79           C
ATOM   11933  NZ   LYS D 262       2.295  98.654  90.917  1.00 41.34           N
ATOM   11934  N    ASN D 263       5.570  96.356  84.191  1.00 32.72           N
ATOM   11935  CA   ASN D 263       6.374  96.309  82.965  1.00 32.82           C
ATOM   11936  C    ASN D 263       6.980  97.655  82.613  1.00 33.35           C
ATOM   11937  O    ASN D 263       6.625  98.664  83.205  1.00 35.75           O
ATOM   11938  CB   ASN D 263       5.484  95.881  81.800  1.00 33.67           C
ATOM   11939  CG   ASN D 263       4.339  96.874  81.542  1.00 35.06           C
ATOM   11940  OD1  ASN D 263       3.460  97.069  82.403  1.00 35.09           O
ATOM   11941  ND2  ASN D 263       4.347  97.505  80.358  1.00 35.24           N
ATOM   11942  N    GLY D 264       7.857  97.676  81.621  1.00 32.53           N
ATOM   11943  CA   GLY D 264       8.469  98.928  81.216  1.00 31.26           C
ATOM   11944  C    GLY D 264       9.943  98.738  80.968  1.00 31.13           C
ATOM   11945  O    GLY D 264      10.416  97.611  80.989  1.00 31.64           O
ATOM   11946  N    ILE D 265      10.681  99.824  80.742  1.00 30.28           N
ATOM   11947  CA   ILE D 265      12.099  99.697  80.491  1.00 30.31           C
ATOM   11948  C    ILE D 265      12.926  99.428  81.758  1.00 30.19           C
ATOM   11949  O    ILE D 265      14.048  98.921  81.681  1.00 31.08           O
ATOM   11950  CB   ILE D 265      12.644 100.947  79.773  1.00 31.39           C
ATOM   11951  CG1  ILE D 265      14.094 100.694  79.359  1.00 31.29           C
ATOM   11952  CG2  ILE D 265      12.599 102.150  80.723  1.00 31.10           C
ATOM   11953  CD1  ILE D 265      14.555 101.497  78.195  1.00 33.95           C
ATOM   11954  N    GLU D 266      12.371  99.756  82.923  1.00 30.77           N
ATOM   11955  CA   GLU D 266      13.075  99.553  84.185  1.00 31.41           C
ATOM   11956  C    GLU D 266      13.358  98.058  84.391  1.00 29.87           C
ATOM   11957  O    GLU D 266      14.507  97.668  84.563  1.00 27.83           O
ATOM   11958  CB   GLU D 266      12.255 100.140  85.348  1.00 35.84           C
ATOM   11959  CG   GLU D 266      13.055 100.422  86.626  1.00 41.18           C
ATOM   11960  CD   GLU D 266      12.290 101.291  87.657  1.00 43.72           C
ATOM   11961  OE1  GLU D 266      11.130 100.961  88.005  1.00 45.56           O
ATOM   11962  OE2  GLU D 266      12.860 102.306  88.126  1.00 44.99           O
ATOM   11963  N    PRO D 267      12.314  97.207  84.392  1.00 28.81           N
ATOM   11964  CA   PRO D 267      12.611  95.775  84.573  1.00 28.57           C
ATOM   11965  C    PRO D 267      13.561  95.240  83.474  1.00 27.38           C
ATOM   11966  O    PRO D 267      14.367  94.326  83.746  1.00 29.71           O
ATOM   11967  CB   PRO D 267      11.237  95.101  84.481  1.00 27.16           C
ATOM   11968  CG   PRO D 267      10.241  96.168  84.773  1.00 28.19           C
ATOM   11969  CD   PRO D 267      10.872  97.429  84.179  1.00 27.45           C
ATOM   11970  N    CYS D 268      13.472  95.776  82.245  1.00 27.41           N
ATOM   11971  CA   CYS D 268      14.327  95.290  81.152  1.00 26.97           C
ATOM   11972  C    CYS D 268      15.773  95.660  81.416  1.00 27.69           C
ATOM   11973  O    CYS D 268      16.691  94.879  81.150  1.00 27.93           O
ATOM   11974  CB   CYS D 268      13.893  95.831  79.754  1.00 27.21           C
ATOM   11975  SG   CYS D 268      12.197  95.392  79.164  1.00 32.82           S
ATOM   11976  N    ILE D 269      16.005  96.867  81.925  1.00 27.49           N
ATOM   11977  CA   ILE D 269      17.368  97.283  82.236  1.00 27.73           C
ATOM   11978  C    ILE D 269      17.957  96.442  83.364  1.00 27.01           C
ATOM   11979  O    ILE D 269      19.106  96.018  83.289  1.00 28.87           O
ATOM   11980  CB   ILE D 269      17.414  98.793  82.625  1.00 27.88           C
ATOM   11981  CG1  ILE D 269      17.399  99.650  81.340  1.00 28.14           C
ATOM   11982  CG2  ILE D 269      18.663  99.102  83.428  1.00 29.06           C
ATOM   11983  CD1  ILE D 269      16.840 101.072  81.574  1.00 30.10           C
ATOM   11984  N    ALA D 270      17.182  96.197  84.414  1.00 27.50           N
ATOM   11985  CA   ALA D 270      17.681  95.379  85.540  1.00 26.61           C
ATOM   11986  C    ALA D 270      17.975  93.956  85.054  1.00 26.07           C
ATOM   11987  O    ALA D 270      19.025  93.364  85.364  1.00 25.81           O
ATOM   11988  CB   ALA D 270      16.626  95.343  86.689  1.00 26.25           C
ATOM   11989  N    ARG D 271      17.055  93.408  84.273  1.00 24.76           N
ATOM   11990  CA   ARG D 271      17.274  92.056  83.785  1.00 24.52           C
ATOM   11991  C    ARG D 271      18.484  91.999  82.875  1.00 24.63           C
ATOM   11992  O    ARG D 271      19.310  91.063  82.923  1.00 25.31           O
ATOM   11993  CB   ARG D 271      16.009  91.552  83.096  1.00 24.14           C
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| ATOM | 11994 | CG | ARG D 271 | 15.064 | 90.970 | 84.102 | 1.00 | 24.72 | C |
| ATOM | 11995 | CD | ARG D 271 | 13.773 | 90.547 | 83.491 | 1.00 | 25.13 | C |
| ATOM | 11996 | NE | ARG D 271 | 12.868 | 90.036 | 84.503 | 1.00 | 24.85 | N |
| ATOM | 11997 | CZ | ARG D 271 | 12.473 | 88.767 | 84.584 | 1.00 | 25.86 | C |
| ATOM | 11998 | NH1 | ARG D 271 | 12.909 | 87.875 | 83.698 | 1.00 | 25.68 | N |
| ATOM | 11999 | NH2 | ARG D 271 | 11.636 | 88.402 | 85.537 | 1.00 | 26.84 | N |
| ATOM | 12000 | N | ALA D 272 | 18.612 | 93.026 | 82.045 | 1.00 | 24.97 | N |
| ATOM | 12001 | CA | ALA D 272 | 19.711 | 93.119 | 81.119 | 1.00 | 25.47 | C |
| ATOM | 12002 | C | ALA D 272 | 20.996 | 93.042 | 81.918 | 1.00 | 25.15 | C |
| ATOM | 12003 | O | ALA D 272 | 21.919 | 92.327 | 81.568 | 1.00 | 25.22 | O |
| ATOM | 12004 | CB | ALA D 272 | 19.620 | 94.357 | 80.236 | 1.00 | 24.01 | C |
| ATOM | 12005 | N | LYS D 273 | 21.066 | 93.786 | 83.017 | 1.00 | 25.40 | N |
| ATOM | 12006 | CA | LYS D 273 | 22.310 | 93.764 | 83.782 | 1.00 | 26.10 | C |
| ATOM | 12007 | C | LYS D 273 | 22.568 | 92.420 | 84.413 | 1.00 | 24.96 | C |
| ATOM | 12008 | O | LYS D 273 | 23.719 | 91.986 | 84.526 | 1.00 | 26.61 | O |
| ATOM | 12009 | CB | LYS D 273 | 22.317 | 94.842 | 84.884 | 1.00 | 27.26 | C |
| ATOM | 12010 | CG | LYS D 273 | 22.344 | 96.255 | 84.348 | 1.00 | 29.69 | C |
| ATOM | 12011 | CD | LYS D 273 | 22.330 | 97.263 | 85.484 | 1.00 | 31.14 | C |
| ATOM | 12012 | CE | LYS D 273 | 22.137 | 98.663 | 84.919 | 1.00 | 33.95 | C |
| ATOM | 12013 | NZ | LYS D 273 | 22.193 | 99.708 | 85.977 | 1.00 | 34.65 | N |
| ATOM | 12014 | N | ALA D 274 | 21.505 | 91.745 | 84.843 | 1.00 | 24.87 | N |
| ATOM | 12015 | CA | ALA D 274 | 21.710 | 90.443 | 85.478 | 1.00 | 24.87 | C |
| ATOM | 12016 | C | ALA D 274 | 22.196 | 89.388 | 84.466 | 1.00 | 23.32 | C |
| ATOM | 12017 | O | ALA D 274 | 23.008 | 88.513 | 84.805 | 1.00 | 20.46 | O |
| ATOM | 12018 | CB | ALA D 274 | 20.412 | 89.960 | 86.165 | 1.00 | 24.54 | C |
| ATOM | 12019 | N | TYR D 275 | 21.701 | 89.492 | 83.228 | 1.00 | 24.20 | N |
| ATOM | 12020 | CA | TYR D 275 | 22.069 | 88.533 | 82.185 | 1.00 | 23.44 | C |
| ATOM | 12021 | C | TYR D 275 | 23.422 | 88.838 | 81.578 | 1.00 | 24.96 | C |
| ATOM | 12022 | O | TYR D 275 | 24.107 | 87.942 | 81.085 | 1.00 | 24.45 | O |
| ATOM | 12023 | CB | TYR D 275 | 21.034 | 88.537 | 81.047 | 1.00 | 22.53 | C |
| ATOM | 12024 | CG | TYR D 275 | 19.584 | 88.340 | 81.447 | 1.00 | 20.59 | C |
| ATOM | 12025 | CD1 | TYR D 275 | 19.241 | 87.618 | 82.585 | 1.00 | 20.90 | C |
| ATOM | 12026 | CD2 | TYR D 275 | 18.552 | 88.818 | 80.645 | 1.00 | 20.04 | C |
| ATOM | 12027 | CE1 | TYR D 275 | 17.923 | 87.375 | 82.918 | 1.00 | 18.82 | C |
| ATOM | 12028 | CE2 | TYR D 275 | 17.203 | 88.569 | 80.974 | 1.00 | 20.09 | C |
| ATOM | 12029 | CZ | TYR D 275 | 16.908 | 87.852 | 82.110 | 1.00 | 19.39 | C |
| ATOM | 12030 | OH | TYR D 275 | 15.604 | 87.633 | 82.454 | 1.00 | 19.37 | O |
| ATOM | 12031 | N | ALA D 276 | 23.839 | 90.099 | 81.644 | 1.00 | 25.17 | N |
| ATOM | 12032 | CA | ALA D 276 | 25.085 | 90.496 | 80.996 | 1.00 | 25.99 | C |
| ATOM | 12033 | C | ALA D 276 | 26.298 | 89.571 | 81.129 | 1.00 | 25.83 | C |
| ATOM | 12034 | O | ALA D 276 | 26.954 | 89.281 | 80.139 | 1.00 | 29.57 | O |
| ATOM | 12035 | CB | ALA D 276 | 25.440 | 91.957 | 81.397 | 1.00 | 25.70 | C |
| ATOM | 12036 | N | PRO D 277 | 26.622 | 89.079 | 82.339 | 1.00 | 26.59 | N |
| ATOM | 12037 | CA | PRO D 277 | 27.781 | 88.184 | 82.480 | 1.00 | 26.11 | C |
| ATOM | 12038 | C | PRO D 277 | 27.535 | 86.858 | 81.768 | 1.00 | 27.11 | C |
| ATOM | 12039 | O | PRO D 277 | 28.452 | 86.057 | 81.596 | 1.00 | 26.64 | O |
| ATOM | 12040 | CB | PRO D 277 | 27.852 | 87.925 | 83.981 | 1.00 | 27.58 | C |
| ATOM | 12041 | CG | PRO D 277 | 27.198 | 89.103 | 84.570 | 1.00 | 27.25 | C |
| ATOM | 12042 | CD | PRO D 277 | 26.056 | 89.409 | 83.656 | 1.00 | 26.75 | C |
| ATOM | 12043 | N | PHE D 278 | 26.282 | 86.611 | 81.391 | 1.00 | 25.70 | N |
| ATOM | 12044 | CA | PHE D 278 | 25.956 | 85.330 | 80.759 | 1.00 | 25.55 | C |
| ATOM | 12045 | C | PHE D 278 | 25.556 | 85.448 | 79.284 | 1.00 | 26.61 | C |
| ATOM | 12046 | O | PHE D 278 | 25.125 | 84.449 | 78.669 | 1.00 | 26.38 | O |
| ATOM | 12047 | CB | PHE D 278 | 24.808 | 84.681 | 81.554 | 1.00 | 23.99 | C |
| ATOM | 12048 | CG | PHE D 278 | 25.129 | 84.456 | 83.000 | 1.00 | 23.64 | C |
| ATOM | 12049 | CD1 | PHE D 278 | 25.953 | 83.415 | 83.387 | 1.00 | 23.12 | C |
| ATOM | 12050 | CD2 | PHE D 278 | 24.636 | 85.311 | 83.975 | 1.00 | 24.85 | C |
| ATOM | 12051 | CE1 | PHE D 278 | 26.292 | 83.218 | 84.735 | 1.00 | 24.42 | C |
| ATOM | 12052 | CE2 | PHE D 278 | 24.967 | 85.127 | 85.323 | 1.00 | 23.93 | C |
| ATOM | 12053 | CZ | PHE D 278 | 25.794 | 84.080 | 85.703 | 1.00 | 25.56 | C |
| ATOM | 12054 | N | ALA D 279 | 25.708 | 86.650 | 78.715 | 1.00 | 27.50 | N |
| ATOM | 12055 | CA | ALA D 279 | 25.303 | 86.913 | 77.340 | 1.00 | 26.73 | C |
| ATOM | 12056 | C | ALA D 279 | 26.292 | 87.681 | 76.453 | 1.00 | 28.35 | C |
| ATOM | 12057 | O | ALA D 279 | 26.802 | 88.746 | 76.841 | 1.00 | 27.64 | O |
| ATOM | 12058 | CB | ALA D 279 | 23.971 | 87.664 | 77.351 | 1.00 | 27.33 | C |
| ATOM | 12059 | N | ASP D 280 | 26.541 | 87.155 | 75.255 | 1.00 | 27.20 | N |
| ATOM | 12060 | CA | ASP D 280 | 27.431 | 87.837 | 74.303 | 1.00 | 27.95 | C |
| ATOM | 12061 | C | ASP D 280 | 26.714 | 89.029 | 73.694 | 1.00 | 27.88 | C |
| ATOM | 12062 | O | ASP D 280 | 27.352 | 89.961 | 73.184 | 1.00 | 30.46 | O |
| ATOM | 12063 | CB | ASP D 280 | 27.897 | 86.898 | 73.184 | 1.00 | 26.79 | C |
| ATOM | 12064 | CG | ASP D 280 | 28.723 | 85.738 | 73.694 | 1.00 | 27.31 | C |
| ATOM | 12065 | OD1 | ASP D 280 | 29.572 | 85.953 | 74.593 | 1.00 | 24.54 | O |
| ATOM | 12066 | OD2 | ASP D 280 | 28.545 | 84.585 | 73.191 | 1.00 | 25.38 | O |
| ATOM | 12067 | N | LEU D 281 | 25.387 | 89.004 | 73.715 | 1.00 | 27.91 | N |
| ATOM | 12068 | CA | LEU D 281 | 24.583 | 90.096 | 73.201 | 1.00 | 27.21 | C |
| ATOM | 12069 | C | LEU D 281 | 23.304 | 90.117 | 73.989 | 1.00 | 28.10 | C |
| ATOM | 12070 | O | LEU D 281 | 22.829 | 89.052 | 74.421 | 1.00 | 27.72 | O |
| ATOM | 12071 | CB | LEU D 281 | 24.255 | 89.927 | 71.707 | 1.00 | 29.37 | C |
| ATOM | 12072 | CG | LEU D 281 | 25.342 | 90.234 | 70.676 | 1.00 | 29.46 | C |
| ATOM | 12073 | CD1 | LEU D 281 | 26.061 | 88.959 | 70.326 | 1.00 | 30.06 | C |

| ATOM | 12074 | CD2 | LEU | D | 281 | 24.735 | 90.853 | 69.436 | 1.00 | 31.55 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 12075 | N | ILE | D | 282 | 22.756 | 91.317 | 74.200 | 1.00 | 26.91 | N |
| ATOM | 12076 | CA | ILE | D | 282 | 21.509 | 91.471 | 74.931 | 1.00 | 26.32 | C |
| ATOM | 12077 | C | ILE | D | 282 | 20.490 | 92.203 | 74.083 | 1.00 | 27.41 | C |
| ATOM | 12078 | O | ILE | D | 282 | 20.818 | 93.145 | 73.354 | 1.00 | 27.71 | O |
| ATOM | 12079 | CB | ILE | D | 282 | 21.738 | 92.228 | 76.254 | 1.00 | 27.08 | C |
| ATOM | 12080 | CG1 | ILE | D | 282 | 22.820 | 91.517 | 77.053 | 1.00 | 28.48 | C |
| ATOM | 12081 | CG2 | ILE | D | 282 | 20.436 | 92.314 | 77.048 | 1.00 | 27.35 | C |
| ATOM | 12082 | CD1 | ILE | D | 282 | 23.147 | 92.180 | 78.373 | 1.00 | 30.31 | C |
| ATOM | 12083 | N | TRP | D | 283 | 19.230 | 91.795 | 74.202 | 1.00 | 27.36 | N |
| ATOM | 12084 | CA | TRP | D | 283 | 18.178 | 92.370 | 73.397 | 1.00 | 27.66 | C |
| ATOM | 12085 | C | TRP | D | 283 | 16.880 | 92.488 | 74.179 | 1.00 | 27.31 | C |
| ATOM | 12086 | O | TRP | D | 283 | 16.499 | 91.564 | 74.908 | 1.00 | 27.31 | O |
| ATOM | 12087 | CB | TRP | D | 283 | 18.040 | 91.487 | 72.127 | 1.00 | 27.11 | C |
| ATOM | 12088 | CG | TRP | D | 283 | 16.685 | 91.349 | 71.480 | 1.00 | 27.97 | C |
| ATOM | 12089 | CD1 | TRP | D | 283 | 15.676 | 92.281 | 71.417 | 1.00 | 27.65 | C |
| ATOM | 12090 | CD2 | TRP | D | 283 | 16.213 | 90.204 | 70.752 | 1.00 | 26.23 | C |
| ATOM | 12091 | NE1 | TRP | D | 283 | 14.611 | 91.781 | 70.698 | 1.00 | 27.74 | N |
| ATOM | 12092 | CE2 | TRP | D | 283 | 14.916 | 90.510 | 70.281 | 1.00 | 26.27 | C |
| ATOM | 12093 | CE3 | TRP | D | 283 | 16.771 | 88.947 | 70.452 | 1.00 | 26.63 | C |
| ATOM | 12094 | CZ2 | TRP | D | 283 | 14.160 | 89.605 | 69.524 | 1.00 | 26.66 | C |
| ATOM | 12095 | CZ3 | TRP | D | 283 | 16.017 | 88.043 | 69.691 | 1.00 | 26.11 | C |
| ATOM | 12096 | CH2 | TRP | D | 283 | 14.726 | 88.382 | 69.238 | 1.00 | 25.98 | C |
| ATOM | 12097 | N | MET | D | 284 | 16.247 | 93.658 | 74.100 | 1.00 | 27.57 | N |
| ATOM | 12098 | CA | MET | D | 284 | 14.960 | 93.856 | 74.758 | 1.00 | 28.65 | C |
| ATOM | 12099 | C | MET | D | 284 | 13.918 | 94.136 | 73.686 | 1.00 | 29.35 | C |
| ATOM | 12100 | O | MET | D | 284 | 14.149 | 94.942 | 72.777 | 1.00 | 31.39 | O |
| ATOM | 12101 | CB | MET | D | 284 | 14.992 | 95.019 | 75.778 | 1.00 | 31.08 | C |
| ATOM | 12102 | CG | MET | D | 284 | 14.979 | 96.409 | 75.196 | 1.00 | 30.33 | C |
| ATOM | 12103 | SD | MET | D | 284 | 14.613 | 97.758 | 76.405 | 1.00 | 34.56 | S |
| ATOM | 12104 | CE | MET | D | 284 | 12.873 | 97.810 | 76.355 | 1.00 | 30.21 | C |
| ATOM | 12105 | N | GLU | D | 285 | 12.794 | 93.439 | 73.749 | 1.00 | 28.42 | N |
| ATOM | 12106 | CA | GLU | D | 285 | 11.729 | 93.660 | 72.786 | 1.00 | 30.01 | C |
| ATOM | 12107 | C | GLU | D | 285 | 11.053 | 94.960 | 73.183 | 1.00 | 30.31 | C |
| ATOM | 12108 | O | GLU | D | 285 | 10.969 | 95.269 | 74.371 | 1.00 | 30.44 | O |
| ATOM | 12109 | CB | GLU | D | 285 | 10.715 | 92.524 | 72.839 | 1.00 | 29.61 | C |
| ATOM | 12110 | CG | GLU | D | 285 | 11.192 | 91.252 | 72.178 | 1.00 | 30.13 | C |
| ATOM | 12111 | CD | GLU | D | 285 | 11.030 | 91.304 | 70.674 | 1.00 | 31.54 | C |
| ATOM | 12112 | OE1 | GLU | D | 285 | 11.748 | 92.094 | 70.012 | 1.00 | 29.96 | O |
| ATOM | 12113 | OE2 | GLU | D | 285 | 10.162 | 90.551 | 70.166 | 1.00 | 34.33 | O |
| ATOM | 12114 | N | THR | D | 286 | 10.571 | 95.704 | 72.191 | 1.00 | 31.49 | N |
| ATOM | 12115 | CA | THR | D | 286 | 9.904 | 96.984 | 72.437 | 1.00 | 32.35 | C |
| ATOM | 12116 | C | THR | D | 286 | 8.537 | 97.011 | 71.750 | 1.00 | 32.62 | C |
| ATOM | 12117 | O | THR | D | 286 | 8.272 | 96.218 | 70.832 | 1.00 | 30.05 | O |
| ATOM | 12118 | CB | THR | D | 286 | 10.723 | 98.173 | 71.870 | 1.00 | 33.77 | C |
| ATOM | 12119 | OG1 | THR | D | 286 | 10.474 | 98.262 | 70.463 | 1.00 | 36.44 | O |
| ATOM | 12120 | CG2 | THR | D | 286 | 12.227 | 97.977 | 72.070 | 1.00 | 31.57 | C |
| ATOM | 12121 | N | GLY | D | 287 | 7.693 | 97.955 | 72.179 | 1.00 | 32.59 | N |
| ATOM | 12122 | CA | GLY | D | 287 | 6.343 | 98.081 | 71.631 | 1.00 | 33.19 | C |
| ATOM | 12123 | C | GLY | D | 287 | 6.224 | 98.935 | 70.373 | 1.00 | 33.32 | C |
| ATOM | 12124 | O | GLY | D | 287 | 5.229 | 98.853 | 69.652 | 1.00 | 33.32 | O |
| ATOM | 12125 | N | THR | D | 288 | 7.242 | 99.749 | 70.112 | 1.00 | 33.19 | N |
| ATOM | 12126 | CA | THR | D | 288 | 7.257 | 100.620 | 68.938 | 1.00 | 32.91 | C |
| ATOM | 12127 | C | THR | D | 288 | 8.728 | 100.788 | 68.588 | 1.00 | 32.28 | C |
| ATOM | 12128 | O | THR | D | 288 | 9.581 | 100.454 | 69.407 | 1.00 | 33.32 | O |
| ATOM | 12129 | CB | THR | D | 288 | 6.676 | 102.020 | 69.265 | 1.00 | 32.99 | C |
| ATOM | 12130 | OG1 | THR | D | 288 | 7.575 | 102.684 | 70.152 | 1.00 | 33.51 | O |
| ATOM | 12131 | CG2 | THR | D | 288 | 5.302 | 101.917 | 69.951 | 1.00 | 33.88 | C |
| ATOM | 12132 | N | PRO | D | 289 | 9.046 | 101.275 | 67.364 | 1.00 | 32.80 | N |
| ATOM | 12133 | CA | PRO | D | 289 | 10.436 | 101.483 | 66.940 | 1.00 | 33.45 | C |
| ATOM | 12134 | C | PRO | D | 289 | 10.819 | 102.917 | 67.364 | 1.00 | 35.14 | C |
| ATOM | 12135 | O | PRO | D | 289 | 10.600 | 103.885 | 66.633 | 1.00 | 35.63 | O |
| ATOM | 12136 | CB | PRO | D | 289 | 10.360 | 101.288 | 65.423 | 1.00 | 33.16 | C |
| ATOM | 12137 | CG | PRO | D | 289 | 9.035 | 101.898 | 65.089 | 1.00 | 32.08 | C |
| ATOM | 12138 | CD | PRO | D | 289 | 8.116 | 101.448 | 66.226 | 1.00 | 32.56 | C |
| ATOM | 12139 | N | ASP | D | 290 | 11.386 | 103.034 | 68.558 | 1.00 | 36.41 | N |
| ATOM | 12140 | CA | ASP | D | 290 | 11.716 | 104.338 | 69.140 | 1.00 | 37.38 | C |
| ATOM | 12141 | C | ASP | D | 290 | 13.179 | 104.532 | 69.446 | 1.00 | 36.36 | C |
| ATOM | 12142 | O | ASP | D | 290 | 13.713 | 103.909 | 70.371 | 1.00 | 37.07 | O |
| ATOM | 12143 | CB | ASP | D | 290 | 10.913 | 104.510 | 70.436 | 1.00 | 40.43 | C |
| ATOM | 12144 | CG | ASP | D | 290 | 11.217 | 105.820 | 71.150 | 1.00 | 42.06 | C |
| ATOM | 12145 | OD1 | ASP | D | 290 | 12.388 | 106.262 | 71.148 | 1.00 | 44.59 | O |
| ATOM | 12146 | OD2 | ASP | D | 290 | 10.280 | 106.391 | 71.725 | 1.00 | 43.11 | O |
| ATOM | 12147 | N | LEU | D | 291 | 13.832 | 105.416 | 68.702 | 1.00 | 35.89 | N |
| ATOM | 12148 | CA | LEU | D | 291 | 15.237 | 105.650 | 68.941 | 1.00 | 35.71 | C |
| ATOM | 12149 | C | LEU | D | 291 | 15.531 | 106.177 | 70.355 | 1.00 | 35.93 | C |
| ATOM | 12150 | O | LEU | D | 291 | 16.569 | 105.858 | 70.927 | 1.00 | 34.49 | O |
| ATOM | 12151 | CB | LEU | D | 291 | 15.806 | 106.630 | 67.907 | 1.00 | 37.36 | C |
| ATOM | 12152 | CG | LEU | D | 291 | 16.033 | 106.114 | 66.488 | 1.00 | 37.59 | C |
| ATOM | 12153 | CD1 | LEU | D | 291 | 16.584 | 107.235 | 65.655 | 1.00 | 37.34 | C |

| ATOM | 12154 | CD2 | LEU | D | 291 | 17.001 | 104.936 | 66.489 | 1.00 | 37.02 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 12155 | N | GLU | D | 292 | 14.639 | 106.979 | 70.923 | 1.00 | 36.57 | N |
| ATOM | 12156 | CA | GLU | D | 292 | 14.914 | 107.509 | 72.274 | 1.00 | 39.43 | C |
| ATOM | 12157 | C | GLU | D | 292 | 14.965 | 106.354 | 73.276 | 1.00 | 38.04 | C |
| ATOM | 12158 | O | GLU | D | 292 | 15.961 | 106.164 | 73.990 | 1.00 | 38.34 | O |
| ATOM | 12159 | CB | GLU | D | 292 | 13.835 | 108.512 | 72.719 | 1.00 | 41.67 | C |
| ATOM | 12160 | CG | GLU | D | 292 | 14.400 | 109.833 | 73.304 | 1.00 | 46.91 | C |
| ATOM | 12161 | CD | GLU | D | 292 | 15.418 | 109.635 | 74.443 | 1.00 | 48.65 | C |
| ATOM | 12162 | OE1 | GLU | D | 292 | 15.007 | 109.393 | 75.607 | 1.00 | 48.98 | O |
| ATOM | 12163 | OE2 | GLU | D | 292 | 16.642 | 109.720 | 74.166 | 1.00 | 51.01 | O |
| ATOM | 12164 | N | ALA | D | 293 | 13.870 | 105.602 | 73.316 | 1.00 | 37.33 | N |
| ATOM | 12165 | CA | ALA | D | 293 | 13.739 | 104.445 | 74.189 | 1.00 | 36.03 | C |
| ATOM | 12166 | C | ALA | D | 293 | 14.946 | 103.528 | 74.030 | 1.00 | 35.32 | C |
| ATOM | 12167 | O | ALA | D | 293 | 15.511 | 103.028 | 75.012 | 1.00 | 34.90 | O |
| ATOM | 12168 | CB | ALA | D | 293 | 12.458 | 103.707 | 73.845 | 1.00 | 36.40 | C |
| ATOM | 12169 | N | ALA | D | 294 | 15.344 | 103.308 | 72.785 | 1.00 | 35.37 | N |
| ATOM | 12170 | CA | ALA | D | 294 | 16.495 | 102.470 | 72.508 | 1.00 | 35.34 | C |
| ATOM | 12171 | C | ALA | D | 294 | 17.758 | 103.039 | 73.147 | 1.00 | 35.83 | C |
| ATOM | 12172 | O | ALA | D | 294 | 18.561 | 102.295 | 73.705 | 1.00 | 35.84 | O |
| ATOM | 12173 | CB | ALA | D | 294 | 16.690 | 102.329 | 71.009 | 1.00 | 35.56 | C |
| ATOM | 12174 | N | ARG | D | 295 | 17.957 | 104.356 | 73.065 | 1.00 | 35.90 | N |
| ATOM | 12175 | CA | ARG | D | 295 | 19.166 | 104.953 | 73.657 | 1.00 | 34.91 | C |
| ATOM | 12176 | C | ARG | D | 295 | 19.115 | 104.855 | 75.184 | 1.00 | 33.18 | C |
| ATOM | 12177 | O | ARG | D | 295 | 20.121 | 104.643 | 75.853 | 1.00 | 30.64 | O |
| ATOM | 12178 | CB | ARG | D | 295 | 19.305 | 106.432 | 73.266 | 1.00 | 36.76 | C |
| ATOM | 12179 | CG | ARG | D | 295 | 20.520 | 107.122 | 73.908 | 1.00 | 39.44 | C |
| ATOM | 12180 | CD | ARG | D | 295 | 20.508 | 108.648 | 73.679 | 1.00 | 42.23 | C |
| ATOM | 12181 | NE | ARG | D | 295 | 20.524 | 108.986 | 72.252 | 1.00 | 43.98 | N |
| ATOM | 12182 | CZ | ARG | D | 295 | 21.593 | 108.861 | 71.454 | 1.00 | 45.27 | C |
| ATOM | 12183 | NH1 | ARG | D | 295 | 22.758 | 108.420 | 71.937 | 1.00 | 45.10 | N |
| ATOM | 12184 | NH2 | ARG | D | 295 | 21.483 | 109.135 | 70.156 | 1.00 | 44.93 | N |
| ATOM | 12185 | N | GLN | D | 296 | 17.912 | 105.046 | 75.698 | 1.00 | 34.02 | N |
| ATOM | 12186 | CA | GLN | D | 296 | 17.622 | 104.984 | 77.107 | 1.00 | 35.51 | C |
| ATOM | 12187 | C | GLN | D | 296 | 18.100 | 103.606 | 77.621 | 1.00 | 35.21 | C |
| ATOM | 12188 | O | GLN | D | 296 | 18.860 | 103.516 | 78.597 | 1.00 | 35.58 | O |
| ATOM | 12189 | CB | GLN | D | 296 | 16.104 | 105.227 | 77.246 | 1.00 | 37.58 | C |
| ATOM | 12190 | CG | GLN | D | 296 | 15.393 | 104.606 | 78.399 | 1.00 | 41.46 | C |
| ATOM | 12191 | CD | GLN | D | 296 | 15.778 | 105.188 | 79.723 | 1.00 | 44.60 | C |
| ATOM | 12192 | OE1 | GLN | D | 296 | 16.971 | 105.262 | 80.068 | 1.00 | 46.09 | O |
| ATOM | 12193 | NE2 | GLN | D | 296 | 14.774 | 105.595 | 80.499 | 1.00 | 44.65 | N |
| ATOM | 12194 | N | PHE | D | 297 | 17.710 | 102.543 | 76.924 | 1.00 | 33.61 | N |
| ATOM | 12195 | CA | PHE | D | 297 | 18.104 | 101.186 | 77.322 | 1.00 | 33.31 | C |
| ATOM | 12196 | C | PHE | D | 297 | 19.607 | 100.952 | 77.204 | 1.00 | 31.98 | C |
| ATOM | 12197 | O | PHE | D | 297 | 20.229 | 100.401 | 78.115 | 1.00 | 31.39 | O |
| ATOM | 12198 | CB | PHE | D | 297 | 17.372 | 100.143 | 76.460 | 1.00 | 33.57 | C |
| ATOM | 12199 | CG | PHE | D | 297 | 17.882 | 98.731 | 76.650 | 1.00 | 33.25 | C |
| ATOM | 12200 | CD1 | PHE | D | 297 | 17.505 | 97.981 | 77.767 | 1.00 | 33.05 | C |
| ATOM | 12201 | CD2 | PHE | D | 297 | 18.764 | 98.169 | 75.729 | 1.00 | 33.25 | C |
| ATOM | 12202 | CE1 | PHE | D | 297 | 18.001 | 96.698 | 77.963 | 1.00 | 32.31 | C |
| ATOM | 12203 | CE2 | PHE | D | 297 | 19.262 | 96.893 | 75.914 | 1.00 | 32.27 | C |
| ATOM | 12204 | CZ | PHE | D | 297 | 18.881 | 96.152 | 77.037 | 1.00 | 33.27 | C |
| ATOM | 12205 | N | SER | D | 298 | 20.187 | 101.373 | 76.085 | 1.00 | 32.87 | N |
| ATOM | 12206 | CA | SER | D | 298 | 21.620 | 101.189 | 75.819 | 1.00 | 33.92 | C |
| ATOM | 12207 | C | SER | D | 298 | 22.568 | 101.872 | 76.805 | 1.00 | 35.24 | C |
| ATOM | 12208 | O | SER | D | 298 | 23.556 | 101.285 | 77.250 | 1.00 | 35.80 | O |
| ATOM | 12209 | CB | SER | D | 298 | 21.951 | 101.701 | 74.416 | 1.00 | 34.72 | C |
| ATOM | 12210 | OG | SER | D | 298 | 23.350 | 101.860 | 74.280 | 1.00 | 36.72 | O |
| ATOM | 12211 | N | GLU | D | 299 | 22.290 | 103.133 | 77.109 | 1.00 | 36.48 | N |
| ATOM | 12212 | CA | GLU | D | 299 | 23.145 | 103.884 | 78.031 | 1.00 | 37.34 | C |
| ATOM | 12213 | C | GLU | D | 299 | 23.156 | 103.208 | 79.408 | 1.00 | 36.36 | C |
| ATOM | 12214 | O | GLU | D | 299 | 24.222 | 102.925 | 79.993 | 1.00 | 35.67 | O |
| ATOM | 12215 | CB | GLU | D | 299 | 22.649 | 105.338 | 78.106 | 1.00 | 39.62 | C |
| ATOM | 12216 | CG | GLU | D | 299 | 22.634 | 106.009 | 76.705 | 1.00 | 43.69 | C |
| ATOM | 12217 | CD | GLU | D | 299 | 22.471 | 107.526 | 76.726 | 1.00 | 45.08 | C |
| ATOM | 12218 | OE1 | GLU | D | 299 | 21.365 | 108.014 | 77.054 | 1.00 | 46.12 | O |
| ATOM | 12219 | OE2 | GLU | D | 299 | 23.461 | 108.224 | 76.405 | 1.00 | 46.40 | O |
| ATOM | 12220 | N | ALA | D | 300 | 21.955 | 102.918 | 79.890 | 1.00 | 35.29 | N |
| ATOM | 12221 | CA | ALA | D | 300 | 21.786 | 102.268 | 81.178 | 1.00 | 34.49 | C |
| ATOM | 12222 | C | ALA | D | 300 | 22.677 | 101.053 | 81.266 | 1.00 | 34.77 | C |
| ATOM | 12223 | O | ALA | D | 300 | 23.497 | 100.921 | 82.180 | 1.00 | 34.76 | O |
| ATOM | 12224 | CB | ALA | D | 300 | 20.318 | 101.863 | 81.370 | 1.00 | 34.02 | C |
| ATOM | 12225 | N | VAL | D | 301 | 22.545 | 100.167 | 80.286 | 1.00 | 34.55 | N |
| ATOM | 12226 | CA | VAL | D | 301 | 23.317 | 98.946 | 80.293 | 1.00 | 33.25 | C |
| ATOM | 12227 | C | VAL | D | 301 | 24.799 | 99.098 | 80.133 | 1.00 | 34.06 | C |
| ATOM | 12228 | O | VAL | D | 301 | 25.562 | 98.422 | 80.830 | 1.00 | 35.06 | O |
| ATOM | 12229 | CB | VAL | D | 301 | 22.815 | 97.986 | 79.212 | 1.00 | 32.65 | C |
| ATOM | 12230 | CG1 | VAL | D | 301 | 23.643 | 96.701 | 79.230 | 1.00 | 30.33 | C |
| ATOM | 12231 | CG2 | VAL | D | 301 | 21.327 | 97.752 | 79.420 | 1.00 | 31.79 | C |
| ATOM | 12232 | N | LYS | D | 302 | 25.237 | 99.947 | 79.211 | 1.00 | 35.16 | N |
| ATOM | 12233 | CA | LYS | D | 302 | 26.687 | 100.101 | 79.029 | 1.00 | 36.96 | C |

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ATOM   12234  C    LYS D 302    27.286 100.888  80.192  1.00 38.53    C
ATOM   12235  O    LYS D 302    28.508 100.870  80.412  1.00 38.55    O
ATOM   12236  CB   LYS D 302    26.999 100.780  77.697  1.00 37.12    C
ATOM   12237  CG   LYS D 302    26.707  99.880  76.494  1.00 39.22    C
ATOM   12238  CD   LYS D 302    27.054 100.553  75.178  1.00 39.50    C
ATOM   12239  CE   LYS D 302    27.273  99.528  74.100  1.00 39.41    C
ATOM   12240  NZ   LYS D 302    28.409  98.621  74.450  1.00 39.97    N
ATOM   12241  N    ALA D 303    26.405 101.558  80.939  1.00 39.35    N
ATOM   12242  CA   ALA D 303    26.812 102.328  82.105  1.00 40.82    C
ATOM   12243  C    ALA D 303    27.481 101.388  83.087  1.00 41.53    C
ATOM   12244  O    ALA D 303    28.306 101.811  83.897  1.00 42.97    O
ATOM   12245  CB   ALA D 303    25.601 102.965  82.766  1.00 40.59    C
ATOM   12246  N    GLU D 304    27.120 100.109  83.021  1.00 41.20    N
ATOM   12247  CA   GLU D 304    27.689  99.126  83.926  1.00 41.43    C
ATOM   12248  C    GLU D 304    28.529  98.087  83.188  1.00 40.35    C
ATOM   12249  O    GLU D 304    29.464  97.519  83.759  1.00 40.84    O
ATOM   12250  CB   GLU D 304    26.569  98.459  84.725  1.00 43.20    C
ATOM   12251  CG   GLU D 304    27.058  97.682  85.925  1.00 47.14    C
ATOM   12252  CD   GLU D 304    25.991  97.527  86.997  1.00 49.22    C
ATOM   12253  OE1  GLU D 304    25.425  98.560  87.419  1.00 49.93    O
ATOM   12254  OE2  GLU D 304    25.727  96.376  87.422  1.00 50.78    O
ATOM   12255  N    TYR D 305    28.200  97.847  81.917  1.00 39.64    N
ATOM   12256  CA   TYR D 305    28.944  96.888  81.087  1.00 38.37    C
ATOM   12257  C    TYR D 305    29.306  97.561  79.759  1.00 38.68    C
ATOM   12258  O    TYR D 305    28.625  97.357  78.749  1.00 37.74    O
ATOM   12259  CB   TYR D 305    28.092  95.624  80.851  1.00 36.49    C
ATOM   12260  CG   TYR D 305    27.947  94.788  82.106  1.00 33.42    C
ATOM   12261  CD1  TYR D 305    28.953  93.907  82.495  1.00 33.67    C
ATOM   12262  CD2  TYR D 305    26.843  94.939  82.943  1.00 33.24    C
ATOM   12263  CE1  TYR D 305    28.865  93.200  83.684  1.00 33.69    C
ATOM   12264  CE2  TYR D 305    26.744  94.239  84.149  1.00 31.70    C
ATOM   12265  CZ   TYR D 305    27.758  93.370  84.509  1.00 33.47    C
ATOM   12266  OH   TYR D 305    27.671  92.641  85.684  1.00 34.38    O
ATOM   12267  N    PRO D 306    30.393  98.371  79.749  1.00 38.49    N
ATOM   12268  CA   PRO D 306    30.886  99.111  78.576  1.00 38.58    C
ATOM   12269  C    PRO D 306    31.129  98.324  77.283  1.00 38.02    C
ATOM   12270  O    PRO D 306    30.859  98.826  76.190  1.00 38.75    O
ATOM   12271  CB   PRO D 306    32.172  99.763  79.097  1.00 38.42    C
ATOM   12272  CG   PRO D 306    31.884  99.945  80.543  1.00 38.32    C
ATOM   12273  CD   PRO D 306    31.293  98.599  80.891  1.00 38.95    C
ATOM   12274  N    ASP D 307    31.659  97.111  77.397  1.00 37.62    N
ATOM   12275  CA   ASP D 307    31.926  96.292  76.212  1.00 37.30    C
ATOM   12276  C    ASP D 307    30.730  95.418  75.764  1.00 36.04    C
ATOM   12277  O    ASP D 307    30.819  94.713  74.762  1.00 36.86    O
ATOM   12278  CB   ASP D 307    33.124  95.366  76.466  1.00 38.10    C
ATOM   12279  CG   ASP D 307    34.417  96.113  76.708  1.00 40.21    C
ATOM   12280  OD1  ASP D 307    34.670  97.089  75.975  1.00 39.64    O
ATOM   12281  OD2  ASP D 307    35.193  95.703  77.614  1.00 41.69    O
ATOM   12282  N    GLN D 308    29.620  95.474  76.487  1.00 34.94    N
ATOM   12283  CA   GLN D 308    28.448  94.646  76.155  1.00 34.18    C
ATOM   12284  C    GLN D 308    27.751  95.026  74.848  1.00 33.29    C
ATOM   12285  O    GLN D 308    27.231  96.136  74.708  1.00 33.87    O
ATOM   12286  CB   GLN D 308    27.427  94.679  77.309  1.00 33.00    C
ATOM   12287  CG   GLN D 308    26.241  93.691  77.144  1.00 31.49    C
ATOM   12288  CD   GLN D 308    26.667  92.224  77.054  1.00 32.27    C
ATOM   12289  OE1  GLN D 308    26.413  91.561  76.043  1.00 32.84    O
ATOM   12290  NE2  GLN D 308    27.306  91.711  78.098  1.00 29.48    N
ATOM   12291  N    MET D 309    27.744  94.100  73.886  1.00 33.42    N
ATOM   12292  CA   MET D 309    27.088  94.365  72.608  1.00 32.88    C
ATOM   12293  C    MET D 309    25.606  94.066  72.762  1.00 32.91    C
ATOM   12294  O    MET D 309    25.189  93.209  73.562  1.00 32.28    O
ATOM   12295  CB   MET D 309    27.682  93.518  71.484  1.00 35.03    C
ATOM   12296  CG   MET D 309    29.201  93.646  71.338  1.00 37.24    C
ATOM   12297  SD   MET D 309    29.808  92.757  69.922  1.00 40.90    S
ATOM   12298  CE   MET D 309    30.046  91.055  70.575  1.00 38.32    C
ATOM   12299  N    LEU D 310    24.812  94.785  71.997  1.00 31.07    N
ATOM   12300  CA   LEU D 310    23.389  94.643  72.071  1.00 31.30    C
ATOM   12301  C    LEU D 310    22.878  94.190  70.706  1.00 31.37    C
ATOM   12302  O    LEU D 310    23.646  94.194  69.736  1.00 31.39    O
ATOM   12303  CB   LEU D 310    22.804  95.996  72.466  1.00 32.03    C
ATOM   12304  CG   LEU D 310    23.442  96.679  73.703  1.00 32.47    C
ATOM   12305  CD1  LEU D 310    22.794  98.047  73.967  1.00 32.32    C
ATOM   12306  CD2  LEU D 310    23.234  95.783  74.928  1.00 31.50    C
ATOM   12307  N    ALA D 311    21.596  93.813  70.641  1.00 30.31    N
ATOM   12308  CA   ALA D 311    20.958  93.372  69.391  1.00 28.54    C
ATOM   12309  C    ALA D 311    19.597  93.996  69.357  1.00 27.91    C
ATOM   12310  O    ALA D 311    18.950  94.129  70.398  1.00 28.77    O
ATOM   12311  CB   ALA D 311    20.832  91.858  69.349  1.00 29.52    C
ATOM   12312  N    TYR D 312    19.141  94.381  68.167  1.00 27.99    N
ATOM   12313  CA   TYR D 312    17.851  95.032  68.050  1.00 28.05    C
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ATOM   12314  C    TYR D 312     16.937  94.396  66.999  1.00 28.47          C
ATOM   12315  O    TYR D 312     17.381  94.086  65.894  1.00 28.70          O
ATOM   12316  CB   TYR D 312     18.099  96.534  67.745  1.00 29.33          C
ATOM   12317  CG   TYR D 312     16.895  97.396  67.923  1.00 29.55          C
ATOM   12318  CD1  TYR D 312     15.870  97.393  66.981  1.00 30.52          C
ATOM   12319  CD2  TYR D 312     16.757  98.216  69.047  1.00 30.47          C
ATOM   12320  CE1  TYR D 312     14.749  98.181  67.145  1.00 29.55          C
ATOM   12321  CE2  TYR D 312     15.627  98.999  69.218  1.00 29.11          C
ATOM   12322  CZ   TYR D 312     14.636  98.975  68.265  1.00 29.10          C
ATOM   12323  OH   TYR D 312     13.504  99.723  68.438  1.00 32.42          O
ATOM   12324  N    ASN D 313     15.657  94.239  67.345  1.00 28.44          N
ATOM   12325  CA   ASN D 313     14.673  93.642  66.448  1.00 28.13          C
ATOM   12326  C    ASN D 313     13.805  94.651  65.708  1.00 28.50          C
ATOM   12327  O    ASN D 313     12.816  95.153  66.262  1.00 29.42          O
ATOM   12328  CB   ASN D 313     13.754  92.654  67.220  1.00 26.43          C
ATOM   12329  CG   ASN D 313     12.544  92.162  66.380  1.00 25.29          C
ATOM   12330  OD1  ASN D 313     12.519  92.280  65.153  1.00 22.82          O
ATOM   12331  ND2  ASN D 313     11.543  91.598  67.057  1.00 26.19          N
ATOM   12332  N    CYS D 314     14.147  94.918  64.445  1.00 27.58          N
ATOM   12333  CA   CYS D 314     13.348  95.834  63.627  1.00 28.18          C
ATOM   12334  C    CYS D 314     12.171  95.037  63.080  1.00 28.51          C
ATOM   12335  O    CYS D 314     12.129  94.734  61.895  1.00 29.62          O
ATOM   12336  CB   CYS D 314     14.179  96.402  62.460  1.00 27.64          C
ATOM   12337  SG   CYS D 314     15.726  97.206  62.963  1.00 32.40          S
ATOM   12338  N    SER D 315     11.206  94.741  63.945  1.00 28.92          N
ATOM   12339  CA   SER D 315     10.042  93.924  63.609  1.00 29.09          C
ATOM   12340  C    SER D 315      8.891  94.459  62.748  1.00 28.07          C
ATOM   12341  O    SER D 315      8.455  95.608  62.866  1.00 28.49          O
ATOM   12342  CB   SER D 315      9.457  93.352  64.904  1.00 28.51          C
ATOM   12343  OG   SER D 315      8.099  92.941  64.749  1.00 32.97          O
ATOM   12344  N    PRO D 316      8.406  93.613  61.840  1.00 27.69          N
ATOM   12345  CA   PRO D 316      7.300  93.903  60.926  1.00 27.22          C
ATOM   12346  C    PRO D 316      6.042  93.990  61.764  1.00 27.41          C
ATOM   12347  O    PRO D 316      4.972  94.347  61.258  1.00 29.49          O
ATOM   12348  CB   PRO D 316      7.296  92.685  59.993  1.00 26.57          C
ATOM   12349  CG   PRO D 316      8.773  92.324  59.934  1.00 27.41          C
ATOM   12350  CD   PRO D 316      9.165  92.428  61.392  1.00 27.62          C
ATOM   12351  N    SER D 317      6.150  93.650  63.052  1.00 27.51          N
ATOM   12352  CA   SER D 317      4.974  93.728  63.910  1.00 28.18          C
ATOM   12353  C    SER D 317      4.670  95.190  64.253  1.00 28.57          C
ATOM   12354  O    SER D 317      3.640  95.477  64.845  1.00 28.57          O
ATOM   12355  CB   SER D 317      5.159  92.904  65.187  1.00 28.82          C
ATOM   12356  OG   SER D 317      5.094  91.523  64.873  1.00 28.72          O
ATOM   12357  N    PHE D 318      5.582  96.081  63.859  1.00 30.36          N
ATOM   12358  CA   PHE D 318      5.453  97.534  64.052  1.00 32.23          C
ATOM   12359  C    PHE D 318      4.897  98.110  62.749  1.00 34.26          C
ATOM   12360  O    PHE D 318      5.279  97.664  61.657  1.00 34.93          O
ATOM   12361  CB   PHE D 318      6.817  98.217  64.251  1.00 32.23          C
ATOM   12362  CG   PHE D 318      7.578  97.790  65.486  1.00 31.42          C
ATOM   12363  CD1  PHE D 318      6.916  97.505  66.681  1.00 30.97          C
ATOM   12364  CD2  PHE D 318      8.983  97.733  65.459  1.00 31.46          C
ATOM   12365  CE1  PHE D 318      7.641  97.174  67.822  1.00 30.98          C
ATOM   12366  CE2  PHE D 318      9.725  97.400  66.608  1.00 30.35          C
ATOM   12367  CZ   PHE D 318      9.046  97.121  67.788  1.00 30.82          C
ATOM   12368  N    ASN D 319      3.997  99.086  62.857  1.00 34.87          N
ATOM   12369  CA   ASN D 319      3.453  99.756  61.672  1.00 35.54          C
ATOM   12370  C    ASN D 319      4.444 100.900  61.529  1.00 36.21          C
ATOM   12371  O    ASN D 319      4.222 101.980  62.074  1.00 37.93          O
ATOM   12372  CB   ASN D 319      2.056 100.289  61.979  1.00 34.71          C
ATOM   12373  CG   ASN D 319      1.385 100.911  60.766  1.00 34.77          C
ATOM   12374  OD1  ASN D 319      0.163 101.056  60.741  1.00 37.46          O
ATOM   12375  ND2  ASN D 319      2.172 101.282  59.763  1.00 32.07          N
ATOM   12376  N    TRP D 320      5.541 100.669  60.817  1.00 37.29          N
ATOM   12377  CA   TRP D 320      6.601 101.670  60.717  1.00 37.46          C
ATOM   12378  C    TRP D 320      6.313 103.121  60.391  1.00 39.78          C
ATOM   12379  O    TRP D 320      6.879 104.017  61.040  1.00 40.68          O
ATOM   12380  CB   TRP D 320      7.720 101.160  59.809  1.00 37.23          C
ATOM   12381  CG   TRP D 320      8.465 100.056  60.472  1.00 35.59          C
ATOM   12382  CD1  TRP D 320      7.977  98.818  60.777  1.00 35.42          C
ATOM   12383  CD2  TRP D 320      9.777 100.127  61.052  1.00 35.40          C
ATOM   12384  NE1  TRP D 320      8.892  98.121  61.517  1.00 34.69          N
ATOM   12385  CE2  TRP D 320     10.009  98.896  61.702  1.00 36.06          C
ATOM   12386  CE3  TRP D 320     10.776 101.114  61.095  1.00 35.91          C
ATOM   12387  CZ2  TRP D 320     11.206  98.622  62.392  1.00 34.46          C
ATOM   12388  CZ3  TRP D 320     11.967 100.847  61.782  1.00 35.12          C
ATOM   12389  CH2  TRP D 320     12.169  99.605  62.423  1.00 35.48          C
ATOM   12390  N    LYS D 321      5.465 103.392  59.410  1.00 40.71          N
ATOM   12391  CA   LYS D 321      5.194 104.796  59.091  1.00 41.79          C
ATOM   12392  C    LYS D 321      4.132 105.434  59.994  1.00 42.47          C
ATOM   12393  O    LYS D 321      3.957 106.663  60.001  1.00 42.48          O
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ATOM  12394  CB  LYS D 321   4.849 104.934  57.602  1.00 42.01       C
ATOM  12395  CG  LYS D 321   6.029 104.503  56.727  1.00 42.57       C
ATOM  12396  CD  LYS D 321   5.724 104.547  55.245  1.00 44.38       C
ATOM  12397  CE  LYS D 321   5.360 105.955  54.844  1.00 46.10       C
ATOM  12398  NZ  LYS D 321   6.307 106.950  55.481  1.00 47.96       N
ATOM  12399  N   LYS D 322   3.425 104.606  60.760  1.00 42.88       N
ATOM  12400  CA  LYS D 322   2.438 105.127  61.681  1.00 43.62       C
ATOM  12401  C   LYS D 322   3.205 105.722  62.855  1.00 44.14       C
ATOM  12402  O   LYS D 322   2.672 106.522  63.623  1.00 44.24       O
ATOM  12403  CB  LYS D 322   1.502 104.031  62.203  1.00 44.34       C
ATOM  12404  CG  LYS D 322   0.640 104.537  63.374  1.00 45.36       C
ATOM  12405  CD  LYS D 322  -0.427 103.576  63.838  1.00 46.81       C
ATOM  12406  CE  LYS D 322  -0.950 104.015  65.202  1.00 48.91       C
ATOM  12407  NZ  LYS D 322  -2.313 103.484  65.523  1.00 49.59       N
ATOM  12408  N   HIS D 323   4.466 105.332  62.990  1.00 44.40       N
ATOM  12409  CA  HIS D 323   5.301 105.829  64.075  1.00 44.67       C
ATOM  12410  C   HIS D 323   6.348 106.809  63.598  1.00 43.94       C
ATOM  12411  O   HIS D 323   6.477 107.908  64.133  1.00 44.12       O
ATOM  12412  CB  HIS D 323   5.997 104.662  64.788  1.00 46.90       C
ATOM  12413  CG  HIS D 323   5.043 103.721  65.445  1.00 49.22       C
ATOM  12414  ND1 HIS D 323   4.178 104.122  66.443  1.00 50.45       N
ATOM  12415  CD2 HIS D 323   4.766 102.418  65.205  1.00 50.08       C
ATOM  12416  CE1 HIS D 323   3.404 103.108  66.786  1.00 51.07       C
ATOM  12417  NE2 HIS D 323   3.740 102.060  66.050  1.00 51.79       N
ATOM  12418  N   LEU D 324   7.095 106.412  62.582  1.00 43.08       N
ATOM  12419  CA  LEU D 324   8.156 107.260  62.082  1.00 42.65       C
ATOM  12420  C   LEU D 324   7.879 107.832  60.704  1.00 42.76       C
ATOM  12421  O   LEU D 324   6.986 107.366  59.975  1.00 42.46       O
ATOM  12422  CB  LEU D 324   9.459 106.473  62.054  1.00 41.37       C
ATOM  12423  CG  LEU D 324   9.787 105.751  63.373  1.00 42.60       C
ATOM  12424  CD1 LEU D 324  10.809 104.668  63.118  1.00 40.41       C
ATOM  12425  CD2 LEU D 324  10.304 106.743  64.415  1.00 41.81       C
ATOM  12426  N   ASP D 325   8.643 108.868  60.369  1.00 42.57       N
ATOM  12427  CA  ASP D 325   8.545 109.512  59.074  1.00 42.33       C
ATOM  12428  C   ASP D 325   9.758 108.982  58.313  1.00 41.00       C
ATOM  12429  O   ASP D 325  10.665 108.421  58.928  1.00 41.12       O
ATOM  12430  CB  ASP D 325   8.599 111.045  59.219  1.00 44.29       C
ATOM  12431  CG  ASP D 325   9.879 111.541  59.908  1.00 45.42       C
ATOM  12432  OD1 ASP D 325  10.910 110.820  59.890  1.00 46.15       O
ATOM  12433  OD2 ASP D 325   9.850 112.680  60.452  1.00 47.91       O
ATOM  12434  N   ASP D 326   9.764 109.156  56.991  1.00 40.30       N
ATOM  12435  CA  ASP D 326  10.840 108.662  56.113  1.00 39.57       C
ATOM  12436  C   ASP D 326  12.259 109.022  56.490  1.00 37.56       C
ATOM  12437  O   ASP D 326  13.199 108.279  56.216  1.00 37.96       O
ATOM  12438  CB  ASP D 326  10.568 109.092  54.659  1.00 40.21       C
ATOM  12439  CG  ASP D 326   9.258 108.534  54.134  1.00 42.36       C
ATOM  12440  OD1 ASP D 326   8.635 107.741  54.885  1.00 43.61       O
ATOM  12441  OD2 ASP D 326   8.855 108.868  52.994  1.00 42.01       O
ATOM  12442  N   ALA D 327  12.426 110.177  57.102  1.00 36.92       N
ATOM  12443  CA  ALA D 327  13.756 110.619  57.505  1.00 36.67       C
ATOM  12444  C   ALA D 327  14.281 109.748  58.641  1.00 35.77       C
ATOM  12445  O   ALA D 327  15.460 109.377  58.682  1.00 34.70       O
ATOM  12446  CB  ALA D 327  13.690 112.065  57.971  1.00 36.08       C
ATOM  12447  N   THR D 328  13.386 109.452  59.573  1.00 36.20       N
ATOM  12448  CA  THR D 328  13.738 108.649  60.737  1.00 36.66       C
ATOM  12449  C   THR D 328  13.892 107.180  60.336  1.00 36.16       C
ATOM  12450  O   THR D 328  14.814 106.506  60.784  1.00 36.97       O
ATOM  12451  CB  THR D 328  12.662 108.773  61.857  1.00 37.56       C
ATOM  12452  OG1 THR D 328  12.369 110.158  62.105  1.00 36.29       O
ATOM  12453  CG2 THR D 328  13.184 108.159  63.158  1.00 36.74       C
ATOM  12454  N   ILE D 329  13.000 106.701  59.473  1.00 36.22       N
ATOM  12455  CA  ILE D 329  13.065 105.310  59.019  1.00 35.23       C
ATOM  12456  C   ILE D 329  14.379 105.076  58.286  1.00 34.70       C
ATOM  12457  O   ILE D 329  15.017 104.042  58.435  1.00 34.51       O
ATOM  12458  CB  ILE D 329  11.911 104.981  58.061  1.00 35.31       C
ATOM  12459  CG1 ILE D 329  10.578 105.077  58.812  1.00 35.80       C
ATOM  12460  CG2 ILE D 329  12.151 103.602  57.448  1.00 35.03       C
ATOM  12461  CD1 ILE D 329   9.332 105.038  57.927  1.00 37.36       C
ATOM  12462  N   ALA D 330  14.771 106.063  57.487  1.00 35.07       N
ATOM  12463  CA  ALA D 330  16.004 106.003  56.703  1.00 33.79       C
ATOM  12464  C   ALA D 330  17.283 105.900  57.533  1.00 33.30       C
ATOM  12465  O   ALA D 330  18.254 105.242  57.129  1.00 34.00       O
ATOM  12466  CB  ALA D 330  16.078 107.235  55.764  1.00 32.65       C
ATOM  12467  N   LYS D 331  17.325 106.555  58.688  1.00 34.53       N
ATOM  12468  CA  LYS D 331  18.541 106.470  59.492  1.00 34.65       C
ATOM  12469  C   LYS D 331  18.423 105.515  60.670  1.00 34.79       C
ATOM  12470  O   LYS D 331  19.397 105.296  61.392  1.00 33.55       O
ATOM  12471  CB  LYS D 331  18.946 107.851  60.035  1.00 36.09       C
ATOM  12472  CG  LYS D 331  17.956 108.502  60.978  1.00 36.29       C
ATOM  12473  CD  LYS D 331  18.662 109.639  61.721  1.00 39.45       C
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ATOM  12474  CE   LYS D 331    17.683 110.489  62.504  1.00 41.23           C
ATOM  12475  NZ   LYS D 331    18.412 111.420  63.428  1.00 42.71           N
ATOM  12476  N    PHE D 332    17.231 104.959  60.855  1.00 34.40           N
ATOM  12477  CA   PHE D 332    16.967 104.070  61.981  1.00 34.78           C
ATOM  12478  C    PHE D 332    18.073 103.130  62.402  1.00 34.77           C
ATOM  12479  O    PHE D 332    18.531 103.205  63.540  1.00 35.58           O
ATOM  12480  CB   PHE D 332    15.708 103.260  61.744  1.00 35.85           C
ATOM  12481  CG   PHE D 332    15.080 102.787  63.004  1.00 37.39           C
ATOM  12482  CD1  PHE D 332    14.344 103.669  63.797  1.00 37.84           C
ATOM  12483  CD2  PHE D 332    15.243 101.468  63.423  1.00 37.96           C
ATOM  12484  CE1  PHE D 332    13.771 103.241  64.996  1.00 38.56           C
ATOM  12485  CE2  PHE D 332    14.684 101.025  64.616  1.00 38.03           C
ATOM  12486  CZ   PHE D 332    13.942 101.909  65.409  1.00 39.69           C
ATOM  12487  N    GLN D 333    18.512 102.247  61.509  1.00 35.06           N
ATOM  12488  CA   GLN D 333    19.571 101.299  61.851  1.00 33.89           C
ATOM  12489  C    GLN D 333    20.930 101.963  62.118  1.00 34.20           C
ATOM  12490  O    GLN D 333    21.656 101.568  63.032  1.00 33.82           O
ATOM  12491  CB   GLN D 333    19.750 100.231  60.751  1.00 35.61           C
ATOM  12492  CG   GLN D 333    18.492  99.434  60.352  1.00 35.47           C
ATOM  12493  CD   GLN D 333    18.772  97.941  60.143  1.00 35.89           C
ATOM  12494  OE1  GLN D 333    19.879  97.537  59.778  1.00 35.22           O
ATOM  12495  NE2  GLN D 333    17.755  97.123  60.372  1.00 36.54           N
ATOM  12496  N    LYS D 334    21.293 102.966  61.329  1.00 34.54           N
ATOM  12497  CA   LYS D 334    22.586 103.608  61.563  1.00 34.15           C.
ATOM  12498  C    LYS D 334    22.636 104.243  62.941  1.00 32.52           C
ATOM  12499  O    LYS D 334    23.659 104.183  63.591  1.00 30.71           O
ATOM  12500  CB   LYS D 334    22.889 104.684  60.526  1.00 35.60           C
ATOM  12501  CG   LYS D 334    24.368 105.061  60.539  1.00 37.97           C
ATOM  12502  CD   LYS D 334    24.665 106.234  59.612  1.00 40.38           C
ATOM  12503  CE   LYS D 334    26.136 106.245  59.163  1.00 41.42           C
ATOM  12504  NZ   LYS D 334    27.110 106.225  60.287  1.00 41.47           N
ATOM  12505  N    GLU D 335    21.526 104.852  63.370  1.00 32.63           N
ATOM  12506  CA   GLU D 335    21.448 105.483  64.699  1.00 34.56           C
ATOM  12507  C    GLU D 335    21.582 104.396  65.776  1.00 34.60           C
ATOM  12508  O    GLU D 335    22.452 104.457  66.661  1.00 34.53           O
ATOM  12509  CB   GLU D 335    20.117 106.233  64.860  1.00 36.04           C
ATOM  12510  CG   GLU D 335    20.017 107.525  64.049  1.00 40.65           C
ATOM  12511  CD   GLU D 335    21.003 108.595  64.534  1.00 43.04           C
ATOM  12512  OE1  GLU D 335    20.814 109.102  65.670  1.00 44.99           O
ATOM  12513  OE2  GLU D 335    21.966 108.914  63.785  1.00 43.43           O
ATOM  12514  N    LEU D 336    20.716 103.388  65.697  1.00 35.31           N
ATOM  12515  CA   LEU D 336    20.779 102.288  66.648  1.00 34.05           C
ATOM  12516  C    LEU D 336    22.210 101.760  66.752  1.00 33.40           C
ATOM  12517  O    LEU D 336    22.699 101.482  67.849  1.00 32.88           O
ATOM  12518  CB   LEU D 336    19.856 101.145  66.212  1.00 33.85           C
ATOM  12519  CG   LEU D 336    18.379 101.458  66.379  1.00 33.36           C
ATOM  12520  CD1  LEU D 336    17.533 100.316  65.843  1.00 33.83           C
ATOM  12521  CD2  LEU D 336    18.109 101.668  67.868  1.00 34.53           C
ATOM  12522  N    ALA D 337    22.891 101.630  65.618  1.00 32.78           N
ATOM  12523  CA   ALA D 337    24.242 101.098  65.653  1.00 32.15           C
ATOM  12524  C    ALA D 337    25.124 101.978  66.506  1.00 34.38           C
ATOM  12525  O    ALA D 337    26.002 101.482  67.199  1.00 33.66           O
ATOM  12526  CB   ALA D 337    24.805 101.010  64.275  1.00 32.68           C
ATOM  12527  N    ALA D 338    24.901 103.292  66.433  1.00 35.66           N
ATOM  12528  CA   ALA D 338    25.713 104.201  67.227  1.00 37.90           C
ATOM  12529  C    ALA D 338    25.478 103.811  68.680  1.00 38.27           C
ATOM  12530  O    ALA D 338    26.419 103.638  69.451  1.00 39.80           O
ATOM  12531  CB   ALA D 338    25.293 105.658  66.980  1.00 38.41           C
ATOM  12532  N    MET D 339    24.213 103.649  69.047  1.00 37.92           N
ATOM  12533  CA   MET D 339    23.883 103.275  70.415  1.00 37.56           C
ATOM  12534  C    MET D 339    24.550 101.966  70.912  1.00 37.13           C
ATOM  12535  O    MET D 339    24.554 101.679  72.115  1.00 37.20           O
ATOM  12536  CB   MET D 339    22.362 103.209  70.555  1.00 38.08           C
ATOM  12537  CG   MET D 339    21.698 104.503  70.226  1.00 39.79           C
ATOM  12538  SD   MET D 339    19.902 104.426  70.364  1.00 46.79           S
ATOM  12539  CE   MET D 339    19.374 105.726  69.173  1.00 45.02           C
ATOM  12540  N    GLY D 340    25.106 101.169  70.004  1.00 36.63           N
ATOM  12541  CA   GLY D 340    25.771  99.941  70.423  1.00 34.96           C
ATOM  12542  C    GLY D 340    25.054  98.644  70.050  1.00 34.35           C
ATOM  12543  O    GLY D 340    25.407  97.558  70.525  1.00 35.05           O
ATOM  12544  N    PHE D 341    24.030  98.752  69.212  1.00 33.96           N
ATOM  12545  CA   PHE D 341    23.311  97.561  68.766  1.00 31.58           C
ATOM  12546  C    PHE D 341    24.094  97.030  67.568  1.00 30.35           C
ATOM  12547  O    PHE D 341    23.954  97.533  66.459  1.00 32.22           O
ATOM  12548  CB   PHE D 341    21.883  97.965  68.407  1.00 32.54           C
ATOM  12549  CG   PHE D 341    21.092  98.481  69.584  1.00 33.97           C
ATOM  12550  CD1  PHE D 341    20.601  97.604  70.554  1.00 34.20           C
ATOM  12551  CD2  PHE D 341    20.862  99.851  69.746  1.00 34.30           C
ATOM  12552  CE1  PHE D 341    19.892  98.083  71.669  1.00 34.29           C
ATOM  12553  CE2  PHE D 341    20.155 100.344  70.854  1.00 34.60           C
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ATOM  12554  CZ   PHE D 341    19.669  99.461  71.818  1.00 34.29        C
ATOM  12555  N    LYS D 342    24.960  96.042  67.801  1.00 30.90        N
ATOM  12556  CA   LYS D 342    25.790  95.464  66.747  1.00 30.54        C
ATOM  12557  C    LYS D 342    25.097  94.370  65.884  1.00 30.39        C
ATOM  12558  O    LYS D 342    25.665  93.905  64.872  1.00 29.75        O
ATOM  12559  CB   LYS D 342    27.082  94.901  67.349  1.00 31.33        C
ATOM  12560  CG   LYS D 342    27.989  95.938  68.016  1.00 34.37        C
ATOM  12561  CD   LYS D 342    28.585  96.872  66.965  1.00 35.48        C
ATOM  12562  CE   LYS D 342    29.693  97.760  67.536  1.00 38.03        C
ATOM  12563  NZ   LYS D 342    30.370  98.579  66.476  1.00 39.54        N
ATOM  12564  N    PHE D 343    23.894  93.958  66.294  1.00 29.00        N
ATOM  12565  CA   PHE D 343    23.136  92.953  65.539  1.00 27.53        C
ATOM  12566  C    PHE D 343    21.692  93.446  65.412  1.00 27.25        C
ATOM  12567  O    PHE D 343    20.974  93.655  66.405  1.00 26.07        O
ATOM  12568  CB   PHE D 343    23.207  91.562  66.209  1.00 27.47        C
ATOM  12569  CG   PHE D 343    22.665  90.450  65.335  1.00 28.55        C
ATOM  12570  CD1  PHE D 343    23.350  90.065  64.180  1.00 27.95        C
ATOM  12571  CD2  PHE D 343    21.401  89.899  65.583  1.00 29.46        C
ATOM  12572  CE1  PHE D 343    22.778  89.159  63.268  1.00 29.27        C
ATOM  12573  CE2  PHE D 343    20.821  88.995  64.676  1.00 28.14        C
ATOM  12574  CZ   PHE D 343    21.511  88.632  63.519  1.00 29.01        C
ATOM  12575  N    GLN D 344    21.279  93.697  64.174  1.00 25.64        N
ATOM  12576  CA   GLN D 344    19.942  94.179  63.956  1.00 27.14        C
ATOM  12577  C    GLN D 344    19.313  93.262  62.917  1.00 25.99        C
ATOM  12578  O    GLN D 344    20.006  92.804  62.026  1.00 26.82        O
ATOM  12579  CB   GLN D 344    19.989  95.634  63.476  1.00 28.77        C
ATOM  12580  CG   GLN D 344    21.126  96.457  64.127  1.00 30.02        C
ATOM  12581  CD   GLN D 344    21.035  97.948  63.803  1.00 30.80        C
ATOM  12582  OE1  GLN D 344    21.989  98.695  64.003  1.00 30.87        O
ATOM  12583  NE2  GLN D 344    19.884  98.378  63.325  1.00 28.40        N
ATOM  12584  N    PHE D 345    17.997  93.049  63.011  1.00 26.49        N
ATOM  12585  CA   PHE D 345    17.323  92.119  62.121  1.00 24.62        C
ATOM  12586  C    PHE D 345    15.809  92.325  62.007  1.00 24.94        C
ATOM  12587  O    PHE D 345    15.148  92.733  62.977  1.00 26.39        O
ATOM  12588  CB   PHE D 345    17.610  90.688  62.644  1.00 25.93        C
ATOM  12589  CG   PHE D 345    17.250  90.493  64.113  1.00 24.92        C
ATOM  12590  CD1  PHE D 345    18.122  90.912  65.118  1.00 25.22        C
ATOM  12591  CD2  PHE D 345    15.974  90.022  64.492  1.00 24.37        C
ATOM  12592  CE1  PHE D 345    17.726  90.880  66.490  1.00 25.69        C
ATOM  12593  CE2  PHE D 345    15.569  89.986  65.862  1.00 21.95        C
ATOM  12594  CZ   PHE D 345    16.444  90.417  66.852  1.00 25.00        C
ATOM  12595  N    ILE D 346    15.265  92.042  60.817  1.00 23.65        N
ATOM  12596  CA   ILE D 346    13.827  92.105  60.574  1.00 24.13        C
ATOM  12597  C    ILE D 346    13.366  90.639  60.656  1.00 24.98        C
ATOM  12598  O    ILE D 346    13.487  89.858  59.694  1.00 24.39        O
ATOM  12599  CB   ILE D 346    13.482  92.665  59.176  1.00 21.21        C
ATOM  12600  CG1  ILE D 346    14.118  94.068  59.013  1.00 22.90        C
ATOM  12601  CG2  ILE D 346    11.952  92.798  59.027  1.00 21.62        C
ATOM  12602  CD1  ILE D 346    13.770  94.763  57.721  1.00 21.84        C
ATOM  12603  N    THR D 347    12.847  90.281  61.826  1.00 26.85        N
ATOM  12604  CA   THR D 347    12.413  88.931  62.092  1.00 24.86        C
ATOM  12605  C    THR D 347    11.525  88.285  61.042  1.00 25.10        C
ATOM  12606  O    THR D 347    11.860  87.195  60.565  1.00 25.95        O
ATOM  12607  CB   THR D 347    11.672  88.871  63.391  1.00 26.36        C
ATOM  12608  OG1  THR D 347    10.594  89.813  63.341  1.00 27.89        O
ATOM  12609  CG2  THR D 347    12.594  89.187  64.542  1.00 25.30        C
ATOM  12610  N    LEU D 348    10.394  88.920  60.703  1.00 23.14        N
ATOM  12611  CA   LEU D 348     9.473  88.328  59.741  1.00 23.07        C
ATOM  12612  C    LEU D 348     9.623  88.722  58.262  1.00 22.96        C
ATOM  12613  O    LEU D 348     8.648  88.626  57.497  1.00 24.62        O
ATOM  12614  CB   LEU D 348     8.026  88.566  60.210  1.00 24.61        C
ATOM  12615  CG   LEU D 348     7.784  88.446  61.726  1.00 26.04        C
ATOM  12616  CD1  LEU D 348     6.302  88.454  62.023  1.00 25.24        C
ATOM  12617  CD2  LEU D 348     8.406  87.167  62.246  1.00 25.60        C
ATOM  12618  N    ALA D 349    10.827  89.149  57.868  1.00 22.08        N
ATOM  12619  CA   ALA D 349    11.128  89.557  56.488  1.00 22.80        C
ATOM  12620  C    ALA D 349    10.685  88.550  55.439  1.00 22.51        C
ATOM  12621  O    ALA D 349    10.036  88.908  54.448  1.00 24.69        O
ATOM  12622  CB   ALA D 349    12.623  89.807  56.323  1.00 24.20        C
ATOM  12623  N    GLY D 350    11.041  87.290  55.658  1.00 22.82        N
ATOM  12624  CA   GLY D 350    10.699  86.236  54.709  1.00 20.03        C
ATOM  12625  C    GLY D 350     9.224  85.963  54.621  1.00 19.51        C
ATOM  12626  O    GLY D 350     8.690  85.761  53.524  1.00 23.67        O
ATOM  12627  N    PHE D 351     8.538  85.929  55.751  1.00 20.91        N
ATOM  12628  CA   PHE D 351     7.129  85.668  55.683  1.00 20.72        C
ATOM  12629  C    PHE D 351     6.463  86.746  54.809  1.00 22.97        C
ATOM  12630  O    PHE D 351     5.651  86.427  53.919  1.00 19.59        O
ATOM  12631  CB   PHE D 351     6.489  85.627  57.080  1.00 21.46        C
ATOM  12632  CG   PHE D 351     4.976  85.701  57.070  1.00 21.88        C
ATOM  12633  CD1  PHE D 351     4.316  86.930  56.962  1.00 23.19        C
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| ATOM | 12634 | CD2 | PHE | D | 351 | 4.207 | 84.567 | 57.224 | 1.00 | 22.36 | C |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 12635 | CE1 | PHE | D | 351 | 2.939 | 87.003 | 57.016 | 1.00 | 21.06 | C |
| ATOM | 12636 | CE2 | PHE | D | 351 | 2.824 | 84.631 | 57.283 | 1.00 | 20.75 | C |
| ATOM | 12637 | CZ | PHE | D | 351 | 2.178 | 85.857 | 57.179 | 1.00 | 22.54 | C |
| ATOM | 12638 | N | HIS | D | 352 | 6.814 | 88.017 | 55.028 | 1.00 | 21.83 | N |
| ATOM | 12639 | CA | HIS | D | 352 | 6.133 | 89.054 | 54.234 | 1.00 | 20.74 | C |
| ATOM | 12640 | C | HIS | D | 352 | 6.502 | 89.039 | 52.760 | 1.00 | 22.11 | C |
| ATOM | 12641 | O | HIS | D | 352 | 5.637 | 89.154 | 51.892 | 1.00 | 25.31 | O |
| ATOM | 12642 | CB | HIS | D | 352 | 6.331 | 90.435 | 54.884 | 1.00 | 18.65 | C |
| ATOM | 12643 | CG | HIS | D | 352 | 5.449 | 90.654 | 56.074 | 1.00 | 19.04 | C |
| ATOM | 12644 | ND1 | HIS | D | 352 | 4.076 | 90.740 | 55.973 | 1.00 | 20.97 | N |
| ATOM | 12645 | CD2 | HIS | D | 352 | 5.724 | 90.671 | 57.399 | 1.00 | 19.34 | C |
| ATOM | 12646 | CE1 | HIS | D | 352 | 3.543 | 90.792 | 57.181 | 1.00 | 20.13 | C |
| ATOM | 12647 | NE2 | HIS | D | 352 | 4.522 | 90.746 | 58.066 | 1.00 | 21.03 | N |
| ATOM | 12648 | N | ALA | D | 353 | 7.770 | 88.855 | 52.452 | 1.00 | 21.36 | N |
| ATOM | 12649 | CA | ALA | D | 353 | 8.190 | 88.816 | 51.066 | 1.00 | 20.76 | C |
| ATOM | 12650 | C | ALA | D | 353 | 7.539 | 87.669 | 50.294 | 1.00 | 23.01 | C |
| ATOM | 12651 | O | ALA | D | 353 | 7.127 | 87.833 | 49.138 | 1.00 | 23.79 | O |
| ATOM | 12652 | CB | ALA | D | 353 | 9.703 | 88.703 | 50.989 | 1.00 | 19.78 | C |
| ATOM | 12653 | N | LEU | D | 354 | 7.437 | 86.515 | 50.935 | 1.00 | 20.76 | N |
| ATOM | 12654 | CA | LEU | D | 354 | 6.845 | 85.356 | 50.296 | 1.00 | 21.35 | C |
| ATOM | 12655 | C | LEU | D | 354 | 5.301 | 85.469 | 50.214 | 1.00 | 20.80 | C |
| ATOM | 12656 | O | LEU | D | 354 | 4.713 | 85.178 | 49.154 | 1.00 | 21.58 | O |
| ATOM | 12657 | CB | LEU | D | 354 | 7.299 | 84.091 | 51.063 | 1.00 | 21.38 | C |
| ATOM | 12658 | CG | LEU | D | 354 | 6.759 | 82.709 | 50.703 | 1.00 | 21.27 | C |
| ATOM | 12659 | CD1 | LEU | D | 354 | 7.541 | 81.655 | 51.415 | 1.00 | 21.34 | C |
| ATOM | 12660 | CD2 | LEU | D | 354 | 5.292 | 82.634 | 51.090 | 1.00 | 20.56 | C |
| ATOM | 12661 | N | ASN | D | 355 | 4.637 | 85.922 | 51.278 | 1.00 | 21.15 | N |
| ATOM | 12662 | CA | ASN | D | 355 | 3.181 | 86.017 | 51.195 | 1.00 | 22.31 | C |
| ATOM | 12663 | C | ASN | D | 355 | 2.793 | 87.090 | 50.201 | 1.00 | 22.72 | C |
| ATOM | 12664 | O | ASN | D | 355 | 1.996 | 86.847 | 49.306 | 1.00 | 23.57 | O |
| ATOM | 12665 | CB | ASN | D | 355 | 2.569 | 86.286 | 52.550 | 1.00 | 22.63 | C |
| ATOM | 12666 | CG | ASN | D | 355 | 2.378 | 85.017 | 53.347 | 1.00 | 22.82 | C |
| ATOM | 12667 | OD1 | ASN | D | 355 | 1.283 | 84.443 | 53.375 | 1.00 | 24.57 | O |
| ATOM | 12668 | ND2 | ASN | D | 355 | 3.446 | 84.551 | 53.967 | 1.00 | 23.54 | N |
| ATOM | 12669 | N | TYR | D | 356 | 3.386 | 88.263 | 50.338 | 1.00 | 23.73 | N |
| ATOM | 12670 | CA | TYR | D | 356 | 3.049 | 89.338 | 49.403 | 1.00 | 25.76 | C |
| ATOM | 12671 | C | TYR | D | 356 | 3.369 | 88.996 | 47.937 | 1.00 | 25.60 | C |
| ATOM | 12672 | O | TYR | D | 356 | 2.490 | 89.109 | 47.068 | 1.00 | 25.23 | O |
| ATOM | 12673 | CB | TYR | D | 356 | 3.764 | 90.636 | 49.755 | 1.00 | 27.12 | C |
| ATOM | 12674 | CG | TYR | D | 356 | 3.415 | 91.693 | 48.737 | 1.00 | 28.22 | C |
| ATOM | 12675 | CD1 | TYR | D | 356 | 2.106 | 92.171 | 48.642 | 1.00 | 30.32 | C |
| ATOM | 12676 | CD2 | TYR | D | 356 | 4.357 | 92.139 | 47.811 | 1.00 | 30.39 | C |
| ATOM | 12677 | CE1 | TYR | D | 356 | 1.730 | 93.082 | 47.618 | 1.00 | 32.00 | C |
| ATOM | 12678 | CE2 | TYR | D | 356 | 3.995 | 93.056 | 46.787 | 1.00 | 30.67 | C |
| ATOM | 12679 | CZ | TYR | D | 356 | 2.679 | 93.507 | 46.705 | 1.00 | 31.88 | C |
| ATOM | 12680 | OH | TYR | D | 356 | 2.295 | 94.363 | 45.691 | 1.00 | 34.10 | O |
| ATOM | 12681 | N | SER | D | 357 | 4.613 | 88.592 | 47.656 | 1.00 | 25.65 | N |
| ATOM | 12682 | CA | SER | D | 357 | 4.965 | 88.274 | 46.282 | 1.00 | 26.19 | C |
| ATOM | 12683 | C | SER | D | 357 | 4.030 | 87.259 | 45.602 | 1.00 | 26.65 | C |
| ATOM | 12684 | O | SER | D | 357 | 3.733 | 87.393 | 44.415 | 1.00 | 26.11 | O |
| ATOM | 12685 | CB | SER | D | 357 | 6.410 | 87.772 | 46.187 | 1.00 | 26.92 | C |
| ATOM | 12686 | OG | SER | D | 357 | 6.548 | 86.469 | 46.768 | 1.00 | 29.06 | O |
| ATOM | 12687 | N | MET | D | 358 | 3.539 | 86.261 | 46.334 | 1.00 | 25.67 | N |
| ATOM | 12688 | CA | MET | D | 358 | 2.692 | 85.256 | 45.701 | 1.00 | 25.01 | C |
| ATOM | 12689 | C | MET | D | 358 | 1.257 | 85.739 | 45.553 | 1.00 | 24.86 | C |
| ATOM | 12690 | O | MET | D | 358 | 0.544 | 85.386 | 44.602 | 1.00 | 25.68 | O |
| ATOM | 12691 | CB | MET | D | 358 | 2.749 | 83.920 | 46.477 | 1.00 | 22.76 | C |
| ATOM | 12692 | CG | MET | D | 358 | 1.919 | 82.769 | 45.803 | 1.00 | 24.52 | C |
| ATOM | 12693 | SD | MET | D | 358 | 2.325 | 82.454 | 44.040 | 1.00 | 26.81 | S |
| ATOM | 12694 | CE | MET | D | 358 | 4.009 | 81.874 | 44.192 | 1.00 | 25.51 | C |
| ATOM | 12695 | N | PHE | D | 359 | 0.809 | 86.550 | 46.490 | 1.00 | 25.95 | N |
| ATOM | 12696 | CA | PHE | D | 359 | -0.538 | 87.053 | 46.346 | 1.00 | 25.42 | C |
| ATOM | 12697 | C | PHE | D | 359 | -0.545 | 87.957 | 45.112 | 1.00 | 24.86 | C |
| ATOM | 12698 | O | PHE | D | 359 | -1.486 | 87.933 | 44.320 | 1.00 | 25.40 | O |
| ATOM | 12699 | CB | PHE | D | 359 | -0.976 | 87.859 | 47.557 | 1.00 | 26.44 | C |
| ATOM | 12700 | CG | PHE | D | 359 | -2.285 | 88.544 | 47.350 | 1.00 | 26.21 | C |
| ATOM | 12701 | CD1 | PHE | D | 359 | -2.343 | 89.768 | 46.682 | 1.00 | 28.02 | C |
| ATOM | 12702 | CD2 | PHE | D | 359 | -3.464 | 87.935 | 47.732 | 1.00 | 26.72 | C |
| ATOM | 12703 | CE1 | PHE | D | 359 | -3.553 | 90.357 | 46.396 | 1.00 | 27.38 | C |
| ATOM | 12704 | CE2 | PHE | D | 359 | -4.689 | 88.518 | 47.452 | 1.00 | 27.28 | C |
| ATOM | 12705 | CZ | PHE | D | 359 | -4.728 | 89.743 | 46.772 | 1.00 | 28.66 | C |
| ATOM | 12706 | N | ASP | D | 360 | 0.529 | 88.713 | 44.941 | 1.00 | 25.84 | N |
| ATOM | 12707 | CA | ASP | D | 360 | 0.644 | 89.659 | 43.826 | 1.00 | 28.19 | C |
| ATOM | 12708 | C | ASP | D | 360 | 0.641 | 88.920 | 42.500 | 1.00 | 28.88 | C |
| ATOM | 12709 | O | ASP | D | 360 | -0.120 | 89.266 | 41.571 | 1.00 | 29.38 | O |
| ATOM | 12710 | CB | ASP | D | 360 | 1.916 | 90.516 | 43.948 | 1.00 | 31.25 | C |
| ATOM | 12711 | CG | ASP | D | 360 | 2.009 | 91.592 | 42.854 | 1.00 | 31.25 | C |
| ATOM | 12712 | OD1 | ASP | D | 360 | 0.995 | 92.299 | 42.624 | 1.00 | 31.48 | O |
| ATOM | 12713 | OD2 | ASP | D | 360 | 3.087 | 91.729 | 42.232 | 1.00 | 32.38 | O |

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ATOM   12714  N    LEU D 361       1.469  87.886  42.411  1.00 27.98           N
ATOM   12715  CA   LEU D 361       1.520  87.110  41.189  1.00 27.03           C
ATOM   12716  C    LEU D 361       0.210  86.379  40.955  1.00 26.51           C
ATOM   12717  O    LEU D 361      -0.337  86.448  39.848  1.00 29.08           O
ATOM   12718  CB   LEU D 361       2.667  86.106  41.229  1.00 25.08           C
ATOM   12719  CG   LEU D 361       2.713  85.137  40.050  1.00 24.81           C
ATOM   12720  CD1  LEU D 361       2.920  85.890  38.720  1.00 26.89           C
ATOM   12721  CD2  LEU D 361       3.861  84.142  40.286  1.00 26.34           C
ATOM   12722  N    ALA D 362      -0.297  85.671  41.967  1.00 25.66           N
ATOM   12723  CA   ALA D 362      -1.543  84.925  41.781  1.00 27.02           C
ATOM   12724  C    ALA D 362      -2.696  85.873  41.436  1.00 28.35           C
ATOM   12725  O    ALA D 362      -3.595  85.514  40.650  1.00 27.59           O
ATOM   12726  CB   ALA D 362      -1.906  84.075  43.054  1.00 24.97           C
ATOM   12727  N    TYR D 363      -2.682  87.075  42.017  1.00 28.40           N
ATOM   12728  CA   TYR D 363      -3.755  88.011  41.727  1.00 29.44           C
ATOM   12729  C    TYR D 363      -3.747  88.374  40.234  1.00 28.67           C
ATOM   12730  O    TYR D 363      -4.761  88.248  39.539  1.00 28.76           O
ATOM   12731  CB   TYR D 363      -3.618  89.281  42.565  1.00 31.54           C
ATOM   12732  CG   TYR D 363      -4.742  90.237  42.286  1.00 35.10           C
ATOM   12733  CD1  TYR D 363      -6.010  90.042  42.860  1.00 35.54           C
ATOM   12734  CD2  TYR D 363      -4.572  91.287  41.377  1.00 35.75           C
ATOM   12735  CE1  TYR D 363      -7.082  90.868  42.532  1.00 37.76           C
ATOM   12736  CE2  TYR D 363      -5.645  92.122  41.037  1.00 37.17           C.
ATOM   12737  CZ   TYR D 363      -6.886  91.906  41.614  1.00 37.83           C
ATOM   12738  OH   TYR D 363      -7.938  92.714  41.257  1.00 39.55           O
ATOM   12739  N    GLY D 364      -2.594  88.805  39.744  1.00 27.06           N
ATOM   12740  CA   GLY D 364      -2.488  89.165  38.344  1.00 27.43           C
ATOM   12741  C    GLY D 364      -2.764  87.999  37.414  1.00 28.87           C
ATOM   12742  O    GLY D 364      -3.367  88.176  36.332  1.00 28.06           O
ATOM   12743  N    TYR D 365      -2.333  86.804  37.827  1.00 27.31           N
ATOM   12744  CA   TYR D 365      -2.534  85.572  37.044  1.00 25.98           C
ATOM   12745  C    TYR D 365      -4.025  85.212  36.931  1.00 25.41           C
ATOM   12746  O    TYR D 365      -4.492  84.768  35.871  1.00 25.61           O
ATOM   12747  CB   TYR D 365      -1.756  84.425  37.724  1.00 27.06           C
ATOM   12748  CG   TYR D 365      -1.790  83.065  37.038  1.00 26.25           C
ATOM   12749  CD1  TYR D 365      -1.102  82.845  35.840  1.00 27.92           C
ATOM   12750  CD2  TYR D 365      -2.441  81.978  37.639  1.00 27.89           C
ATOM   12751  CE1  TYR D 365      -1.043  81.569  35.250  1.00 28.00           C
ATOM   12752  CE2  TYR D 365      -2.400  80.709  37.064  1.00 27.49           C
ATOM   12753  CZ   TYR D 365      -1.692  80.504  35.864  1.00 30.33           C
ATOM   12754  OH   TYR D 365      -1.615  79.239  35.274  1.00 28.82           O
ATOM   12755  N    ALA D 366      -4.766  85.384  38.023  1.00 25.27           N
ATOM   12756  CA   ALA D 366      -6.197  85.078  37.996  1.00 28.72           C
ATOM   12757  C    ALA D 366      -6.894  86.007  37.000  1.00 30.66           C
ATOM   12758  O    ALA D 366      -7.907  85.634  36.403  1.00 30.72           O
ATOM   12759  CB   ALA D 366      -6.827  85.250  39.363  1.00 28.46           C
ATOM   12760  N    GLN D 367      -6.342  87.204  36.827  1.00 33.01           N
ATOM   12761  CA   GLN D 367      -6.939  88.176  35.915  1.00 35.41           C
ATOM   12762  C    GLN D 367      -6.412  88.042  34.492  1.00 35.46           C
ATOM   12763  O    GLN D 367      -7.189  87.819  33.552  1.00 35.92           O
ATOM   12764  CB   GLN D 367      -6.678  89.611  36.395  1.00 36.37           C
ATOM   12765  CG   GLN D 367      -6.849  89.864  37.879  1.00 38.80           C
ATOM   12766  CD   GLN D 367      -8.216  89.487  38.385  1.00 41.45           C
ATOM   12767  OE1  GLN D 367      -9.212  89.607  37.664  1.00 42.17           O
ATOM   12768  NE2  GLN D 367      -8.281  89.037  39.641  1.00 42.51           N
ATOM   12769  N    ASN D 368      -5.093  88.173  34.353  1.00 34.72           N
ATOM   12770  CA   ASN D 368      -4.409  88.165  33.060  1.00 35.30           C
ATOM   12771  C    ASN D 368      -3.561  86.934  32.638  1.00 33.76           C
ATOM   12772  O    ASN D 368      -2.731  87.039  31.732  1.00 31.21           O
ATOM   12773  CB   ASN D 368      -3.492  89.395  32.993  1.00 38.51           C
ATOM   12774  CG   ASN D 368      -4.261  90.717  32.965  1.00 41.52           C
ATOM   12775  OD1  ASN D 368      -4.726  91.206  33.996  1.00 44.26           O
ATOM   12776  ND2  ASN D 368      -4.394  91.302  31.767  1.00 44.22           N
ATOM   12777  N    GLN D 369      -3.752  85.790  33.282  1.00 31.76           N
ATOM   12778  CA   GLN D 369      -2.957  84.608  32.940  1.00 30.95           C
ATOM   12779  C    GLN D 369      -1.490  84.893  32.684  1.00 29.08           C
ATOM   12780  O    GLN D 369      -0.868  85.577  33.473  1.00 29.05           O
ATOM   12781  CB   GLN D 369      -3.543  83.871  31.751  1.00 32.66           C
ATOM   12782  CG   GLN D 369      -4.914  83.318  32.039  1.00 36.36           C
ATOM   12783  CD   GLN D 369      -5.948  84.408  32.057  1.00 37.74           C
ATOM   12784  OE1  GLN D 369      -5.847  85.336  31.288  1.00 40.16           O
ATOM   12785  NE2  GLN D 369      -6.958  84.291  32.916  1.00 39.37           N
ATOM   12786  N    MET D 370      -0.930  84.393  31.583  1.00 28.25           N
ATOM   12787  CA   MET D 370       0.508  84.573  31.324  1.00 26.86           C
ATOM   12788  C    MET D 370       1.145  85.971  31.379  1.00 28.25           C
ATOM   12789  O    MET D 370       2.345  86.097  31.671  1.00 27.68           O
ATOM   12790  CB   MET D 370       0.888  83.936  29.994  1.00 26.75           C
ATOM   12791  CG   MET D 370       0.722  82.419  29.955  1.00 26.67           C
ATOM   12792  SD   MET D 370       1.438  81.646  31.447  1.00 26.88           S
ATOM   12793  CE   MET D 370       3.128  81.905  31.153  1.00 23.62           C
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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 12794 | N | SER | D | 371 | 0.390 | 87.019 | 31.068 | 1.00 | 27.90 | N |
| ATOM | 12795 | CA | SER | D | 371 | 0.982 | 88.360 | 31.120 | 1.00 | 29.28 | C |
| ATOM | 12796 | C | SER | D | 371 | 1.565 | 88.664 | 32.502 | 1.00 | 28.71 | C |
| ATOM | 12797 | O | SER | D | 371 | 2.660 | 89.240 | 32.625 | 1.00 | 29.11 | O |
| ATOM | 12798 | CB | SER | D | 371 | -0.076 | 89.411 | 30.770 | 1.00 | 30.16 | C |
| ATOM | 12799 | OG | SER | D | 371 | -0.666 | 89.109 | 29.505 | 1.00 | 30.51 | O |
| ATOM | 12800 | N | ALA | D | 372 | 0.837 | 88.270 | 33.545 | 1.00 | 27.88 | N |
| ATOM | 12801 | CA | ALA | D | 372 | 1.303 | 88.530 | 34.902 | 1.00 | 27.48 | C |
| ATOM | 12802 | C | ALA | D | 372 | 2.617 | 87.809 | 35.173 | 1.00 | 27.81 | C |
| ATOM | 12803 | O | ALA | D | 372 | 3.494 | 88.349 | 35.816 | 1.00 | 26.26 | O |
| ATOM | 12804 | CB | ALA | D | 372 | 0.229 | 88.116 | 35.942 | 1.00 | 25.66 | C |
| ATOM | 12805 | N | TYR | D | 373 | 2.773 | 86.581 | 34.687 | 1.00 | 27.93 | N |
| ATOM | 12806 | CA | TYR | D | 373 | 4.034 | 85.905 | 34.963 | 1.00 | 28.10 | C |
| ATOM | 12807 | C | TYR | D | 373 | 5.156 | 86.522 | 34.160 | 1.00 | 27.28 | C |
| ATOM | 12808 | O | TYR | D | 373 | 6.273 | 86.649 | 34.634 | 1.00 | 27.17 | O |
| ATOM | 12809 | CB | TYR | D | 373 | 3.985 | 84.421 | 34.642 | 1.00 | 27.48 | C |
| ATOM | 12810 | CG | TYR | D | 373 | 5.238 | 83.734 | 35.131 | 1.00 | 26.23 | C |
| ATOM | 12811 | CD1 | TYR | D | 373 | 5.367 | 83.365 | 36.472 | 1.00 | 25.31 | C |
| ATOM | 12812 | CD2 | TYR | D | 373 | 6.342 | 83.593 | 34.298 | 1.00 | 25.71 | C |
| ATOM | 12813 | CE1 | TYR | D | 373 | 6.563 | 82.892 | 36.964 | 1.00 | 24.52 | C |
| ATOM | 12814 | CE2 | TYR | D | 373 | 7.538 | 83.128 | 34.777 | 1.00 | 24.97 | C |
| ATOM | 12815 | CZ | TYR | D | 373 | 7.646 | 82.783 | 36.113 | 1.00 | 24.49 | C |
| ATOM | 12816 | OH | TYR | D | 373 | 8.864 | 82.362 | 36.610 | 1.00 | 24.39 | O |
| ATOM | 12817 | N | VAL | D | 374 | 4.878 | 86.871 | 32.913 | 1.00 | 28.33 | N |
| ATOM | 12818 | CA | VAL | D | 374 | 5.916 | 87.480 | 32.086 | 1.00 | 27.27 | C |
| ATOM | 12819 | C | VAL | D | 374 | 6.418 | 88.791 | 32.719 | 1.00 | 28.19 | C |
| ATOM | 12820 | O | VAL | D | 374 | 7.583 | 89.131 | 32.592 | 1.00 | 26.28 | O |
| ATOM | 12821 | CB | VAL | D | 374 | 5.386 | 87.727 | 30.670 | 1.00 | 28.99 | C |
| ATOM | 12822 | CG1 | VAL | D | 374 | 6.465 | 88.407 | 29.797 | 1.00 | 26.44 | C |
| ATOM | 12823 | CG2 | VAL | D | 374 | 4.950 | 86.367 | 30.065 | 1.00 | 25.72 | C |
| ATOM | 12824 | N | GLU | D | 375 | 5.535 | 89.525 | 33.393 | 1.00 | 29.69 | N |
| ATOM | 12825 | CA | GLU | D | 375 | 5.958 | 90.764 | 34.068 | 1.00 | 31.72 | C |
| ATOM | 12826 | C | GLU | D | 375 | 7.024 | 90.403 | 35.092 | 1.00 | 31.13 | C |
| ATOM | 12827 | O | GLU | D | 375 | 8.057 | 91.087 | 35.224 | 1.00 | 30.02 | O |
| ATOM | 12828 | CB | GLU | D | 375 | 4.772 | 91.424 | 34.755 | 1.00 | 33.58 | C |
| ATOM | 12829 | CG | GLU | D | 375 | 3.778 | 91.996 | 33.755 | 1.00 | 38.10 | C |
| ATOM | 12830 | CD | GLU | D | 375 | 2.487 | 92.493 | 34.394 | 1.00 | 41.06 | C |
| ATOM | 12831 | OE1 | GLU | D | 375 | 2.484 | 92.787 | 35.621 | 1.00 | 40.77 | O |
| ATOM | 12832 | OE2 | GLU | D | 375 | 1.476 | 92.605 | 33.646 | 1.00 | 42.61 | O |
| ATOM | 12833 | N | LEU | D | 376 | 6.795 | 89.301 | 35.806 | 1.00 | 30.38 | N |
| ATOM | 12834 | CA | LEU | D | 376 | 7.776 | 88.858 | 36.782 | 1.00 | 27.57 | C |
| ATOM | 12835 | C | LEU | D | 376 | 9.060 | 88.387 | 36.081 | 1.00 | 27.70 | C |
| ATOM | 12836 | O | LEU | D | 376 | 10.150 | 88.780 | 36.468 | 1.00 | 25.29 | O |
| ATOM | 12837 | CB | LEU | D | 376 | 7.189 | 87.742 | 37.653 | 1.00 | 27.61 | C |
| ATOM | 12838 | CG | LEU | D | 376 | 8.179 | 86.916 | 38.497 | 1.00 | 27.20 | C |
| ATOM | 12839 | CD1 | LEU | D | 376 | 9.099 | 87.789 | 39.313 | 1.00 | 24.96 | C |
| ATOM | 12840 | CD2 | LEU | D | 376 | 7.328 | 86.013 | 39.427 | 1.00 | 27.44 | C |
| ATOM | 12841 | N | GLN | D | 377 | 8.953 | 87.560 | 35.039 | 1.00 | 28.55 | N |
| ATOM | 12842 | CA | GLN | D | 377 | 10.174 | 87.110 | 34.377 | 1.00 | 29.11 | C |
| ATOM | 12843 | C | GLN | D | 377 | 11.035 | 88.275 | 33.881 | 1.00 | 30.19 | C |
| ATOM | 12844 | O | GLN | D | 377 | 12.263 | 88.227 | 33.938 | 1.00 | 30.28 | O |
| ATOM | 12845 | CB | GLN | D | 377 | 9.865 | 86.183 | 33.196 | 1.00 | 28.68 | C |
| ATOM | 12846 | CG | GLN | D | 377 | 11.124 | 85.480 | 32.672 | 1.00 | 28.69 | C |
| ATOM | 12847 | CD | GLN | D | 377 | 10.822 | 84.365 | 31.667 | 1.00 | 31.97 | C |
| ATOM | 12848 | OE1 | GLN | D | 377 | 11.327 | 83.231 | 31.804 | 1.00 | 32.87 | O |
| ATOM | 12849 | NE2 | GLN | D | 377 | 9.998 | 84.672 | 30.654 | 1.00 | 29.90 | N |
| ATOM | 12850 | N | GLU | D | 378 | 10.387 | 89.321 | 33.378 | 1.00 | 30.84 | N |
| ATOM | 12851 | CA | GLU | D | 378 | 11.133 | 90.475 | 32.885 | 1.00 | 31.10 | C |
| ATOM | 12852 | C | GLU | D | 378 | 11.831 | 91.232 | 34.029 | 1.00 | 30.73 | C |
| ATOM | 12853 | O | GLU | D | 378 | 12.960 | 91.724 | 33.856 | 1.00 | 29.44 | O |
| ATOM | 12854 | CB | GLU | D | 378 | 10.208 | 91.387 | 32.092 | 1.00 | 31.82 | C |
| ATOM | 12855 | CG | GLU | D | 378 | 9.666 | 90.735 | 30.819 | 1.00 | 33.02 | C |
| ATOM | 12856 | CD | GLU | D | 378 | 10.746 | 90.473 | 29.773 | 1.00 | 33.29 | C |
| ATOM | 12857 | OE1 | GLU | D | 378 | 11.489 | 91.425 | 29.433 | 1.00 | 32.88 | O |
| ATOM | 12858 | OE2 | GLU | D | 378 | 10.852 | 89.322 | 29.279 | 1.00 | 30.72 | O |
| ATOM | 12859 | N | ARG | D | 379 | 11.176 | 91.317 | 35.191 | 1.00 | 30.30 | N |
| ATOM | 12860 | CA | ARG | D | 379 | 11.812 | 91.955 | 36.340 | 1.00 | 30.82 | C |
| ATOM | 12861 | C | ARG | D | 379 | 13.057 | 91.150 | 36.697 | 1.00 | 30.40 | C |
| ATOM | 12862 | O | ARG | D | 379 | 14.100 | 91.720 | 36.999 | 1.00 | 28.66 | O |
| ATOM | 12863 | CB | ARG | D | 379 | 10.887 | 92.013 | 37.557 | 1.00 | 33.33 | C |
| ATOM | 12864 | CG | ARG | D | 379 | 9.831 | 93.088 | 37.473 | 1.00 | 35.72 | C |
| ATOM | 12865 | CD | ARG | D | 379 | 9.256 | 93.396 | 38.840 | 1.00 | 38.87 | C |
| ATOM | 12866 | NE | ARG | D | 379 | 8.452 | 92.304 | 39.386 | 1.00 | 41.66 | N |
| ATOM | 12867 | CZ | ARG | D | 379 | 7.250 | 91.955 | 38.938 | 1.00 | 43.29 | C |
| ATOM | 12868 | NH1 | ARG | D | 379 | 6.703 | 92.608 | 37.917 | 1.00 | 45.39 | N |
| ATOM | 12869 | NH2 | ARG | D | 379 | 6.573 | 90.970 | 39.529 | 1.00 | 44.13 | N |
| ATOM | 12870 | N | GLU | D | 380 | 12.963 | 89.818 | 36.662 | 1.00 | 28.80 | N |
| ATOM | 12871 | CA | GLU | D | 380 | 14.142 | 89.015 | 36.975 | 1.00 | 28.31 | C |
| ATOM | 12872 | C | GLU | D | 380 | 15.264 | 89.246 | 35.968 | 1.00 | 27.73 | C |
| ATOM | 12873 | O | GLU | D | 380 | 16.447 | 89.295 | 36.328 | 1.00 | 26.36 | O |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 12874 | CB | GLU | D | 380 | 13.795 | 87.528 | 37.014 | 1.00 | 28.55 | C |
| ATOM | 12875 | CG | GLU | D | 380 | 12.868 | 87.166 | 38.130 | 1.00 | 27.41 | C |
| ATOM | 12876 | CD | GLU | D | 380 | 12.560 | 85.682 | 38.115 | 1.00 | 27.95 | C |
| ATOM | 12877 | OE1 | GLU | D | 380 | 11.722 | 85.268 | 37.289 | 1.00 | 28.42 | O |
| ATOM | 12878 | OE2 | GLU | D | 380 | 13.164 | 84.936 | 38.905 | 1.00 | 24.76 | O |
| ATOM | 12879 | N | PHE | D | 381 | 14.894 | 89.354 | 34.698 | 1.00 | 28.35 | N |
| ATOM | 12880 | CA | PHE | D | 381 | 15.890 | 89.625 | 33.655 | 1.00 | 30.32 | C |
| ATOM | 12881 | C | PHE | D | 381 | 16.532 | 90.993 | 33.945 | 1.00 | 29.92 | C |
| ATOM | 12882 | O | PHE | D | 381 | 17.746 | 91.163 | 33.896 | 1.00 | 28.39 | O |
| ATOM | 12883 | CB | PHE | D | 381 | 15.213 | 89.633 | 32.277 | 1.00 | 30.91 | C |
| ATOM | 12884 | CG | PHE | D | 381 | 15.104 | 88.264 | 31.660 | 1.00 | 32.14 | C |
| ATOM | 12885 | CD1 | PHE | D | 381 | 16.220 | 87.413 | 31.622 | 1.00 | 33.00 | C |
| ATOM | 12886 | CD2 | PHE | D | 381 | 13.914 | 87.822 | 31.115 | 1.00 | 32.71 | C |
| ATOM | 12887 | CE1 | PHE | D | 381 | 16.139 | 86.139 | 31.047 | 1.00 | 32.41 | C |
| ATOM | 12888 | CE2 | PHE | D | 381 | 13.823 | 86.546 | 30.536 | 1.00 | 32.35 | C |
| ATOM | 12889 | CZ | PHE | D | 381 | 14.937 | 85.706 | 30.504 | 1.00 | 32.36 | C |
| ATOM | 12890 | N | ALA | D | 382 | 15.679 | 91.950 | 34.264 | 1.00 | 30.87 | N |
| ATOM | 12891 | CA | ALA | D | 382 | 16.126 | 93.293 | 34.578 | 1.00 | 33.11 | C |
| ATOM | 12892 | C | ALA | D | 382 | 17.090 | 93.246 | 35.774 | 1.00 | 34.90 | C |
| ATOM | 12893 | O | ALA | D | 382 | 18.225 | 93.752 | 35.707 | 1.00 | 35.65 | O |
| ATOM | 12894 | CB | ALA | D | 382 | 14.910 | 94.164 | 34.887 | 1.00 | 33.73 | C |
| ATOM | 12895 | N | ALA | D | 383 | 16.668 | 92.587 | 36.851 | 1.00 | 34.01 | N |
| ATOM | 12896 | CA | ALA | D | 383 | 17.491 | 92.507 | 38.044 | 1.00 | 34.14 | C |
| ATOM | 12897 | C | ALA | D | 383 | 18.851 | 91.828 | 37.876 | 1.00 | 34.56 | C |
| ATOM | 12898 | O | ALA | D | 383 | 19.647 | 91.815 | 38.806 | 1.00 | 34.58 | O |
| ATOM | 12899 | CB | ALA | D | 383 | 16.712 | 91.826 | 39.143 | 1.00 | 35.28 | C |
| ATOM | 12900 | N | GLU | D | 384 | 19.132 | 91.276 | 36.704 | 1.00 | 35.63 | N |
| ATOM | 12901 | CA | GLU | D | 384 | 20.407 | 90.595 | 36.512 | 1.00 | 37.68 | C |
| ATOM | 12902 | C | GLU | D | 384 | 21.592 | 91.565 | 36.554 | 1.00 | 39.50 | C |
| ATOM | 12903 | O | GLU | D | 384 | 22.723 | 91.175 | 36.842 | 1.00 | 38.34 | O |
| ATOM | 12904 | CB | GLU | D | 384 | 20.379 | 89.805 | 35.201 | 1.00 | 39.53 | C |
| ATOM | 12905 | CG | GLU | D | 384 | 19.162 | 88.846 | 35.079 | 1.00 | 42.33 | C |
| ATOM | 12906 | CD | GLU | D | 384 | 19.332 | 87.749 | 34.002 | 1.00 | 43.90 | C |
| ATOM | 12907 | OE1 | GLU | D | 384 | 20.042 | 87.985 | 33.001 | 1.00 | 43.74 | O |
| ATOM | 12908 | OE2 | GLU | D | 384 | 18.732 | 86.648 | 34.154 | 1.00 | 44.99 | O |
| ATOM | 12909 | N | GLU | D | 385 | 21.330 | 92.835 | 36.268 | 1.00 | 41.16 | N |
| ATOM | 12910 | CA | GLU | D | 385 | 22.397 | 93.829 | 36.304 | 1.00 | 43.28 | C |
| ATOM | 12911 | C | GLU | D | 385 | 22.765 | 94.122 | 37.755 | 1.00 | 42.98 | C |
| ATOM | 12912 | O | GLU | D | 385 | 23.832 | 94.681 | 38.024 | 1.00 | 43.09 | O |
| ATOM | 12913 | CB | GLU | D | 385 | 21.962 | 95.114 | 35.592 | 1.00 | 45.23 | C |
| ATOM | 12914 | CG | GLU | D | 385 | 20.618 | 95.663 | 36.048 | 1.00 | 48.76 | C |
| ATOM | 12915 | CD | GLU | D | 385 | 19.761 | 96.142 | 34.878 | 1.00 | 51.75 | C |
| ATOM | 12916 | OE1 | GLU | D | 385 | 20.179 | 95.974 | 33.706 | 1.00 | 52.47 | O |
| ATOM | 12917 | OE2 | GLU | D | 385 | 18.658 | 96.679 | 35.135 | 1.00 | 53.26 | O |
| ATOM | 12918 | N | ARG | D | 386 | 21.888 | 93.737 | 38.687 | 1.00 | 41.55 | N |
| ATOM | 12919 | CA | ARG | D | 386 | 22.153 | 93.945 | 40.114 | 1.00 | 41.09 | C |
| ATOM | 12920 | C | ARG | D | 386 | 22.903 | 92.751 | 40.713 | 1.00 | 39.79 | C |
| ATOM | 12921 | O | ARG | D | 386 | 23.397 | 92.805 | 41.845 | 1.00 | 39.49 | O |
| ATOM | 12922 | CB | ARG | D | 386 | 20.847 | 94.170 | 40.887 | 1.00 | 42.46 | C |
| ATOM | 12923 | CG | ARG | D | 386 | 20.234 | 95.553 | 40.713 | 1.00 | 43.40 | C |
| ATOM | 12924 | CD | ARG | D | 386 | 19.072 | 95.752 | 41.649 | 1.00 | 45.37 | C |
| ATOM | 12925 | NE | ARG | D | 386 | 17.870 | 95.047 | 41.216 | 1.00 | 46.93 | N |
| ATOM | 12926 | CZ | ARG | D | 386 | 16.894 | 94.670 | 42.039 | 1.00 | 48.29 | C |
| ATOM | 12927 | NH1 | ARG | D | 386 | 16.991 | 94.917 | 43.339 | 1.00 | 49.13 | N |
| ATOM | 12928 | NH2 | ARG | D | 386 | 15.801 | 94.087 | 41.565 | 1.00 | 48.81 | N |
| ATOM | 12929 | N | GLY | D | 387 | 22.980 | 91.661 | 39.956 | 1.00 | 37.92 | N |
| ATOM | 12930 | CA | GLY | D | 387 | 23.687 | 90.495 | 40.446 | 1.00 | 34.78 | C |
| ATOM | 12931 | C | GLY | D | 387 | 22.813 | 89.252 | 40.526 | 1.00 | 33.32 | C |
| ATOM | 12932 | O | GLY | D | 387 | 23.343 | 88.143 | 40.696 | 1.00 | 32.34 | O |
| ATOM | 12933 | N | TYR | D | 388 | 21.497 | 89.443 | 40.403 | 1.00 | 30.94 | N |
| ATOM | 12934 | CA | TYR | D | 388 | 20.510 | 88.356 | 40.466 | 1.00 | 29.72 | C |
| ATOM | 12935 | C | TYR | D | 388 | 20.878 | 87.272 | 39.471 | 1.00 | 28.60 | C |
| ATOM | 12936 | O | TYR | D | 388 | 21.297 | 87.556 | 38.353 | 1.00 | 28.02 | O |
| ATOM | 12937 | CB | TYR | D | 388 | 19.119 | 88.909 | 40.172 | 1.00 | 30.58 | C |
| ATOM | 12938 | CG | TYR | D | 388 | 17.975 | 87.938 | 40.374 | 1.00 | 31.25 | C |
| ATOM | 12939 | CD1 | TYR | D | 388 | 17.654 | 87.452 | 41.656 | 1.00 | 30.12 | C |
| ATOM | 12940 | CD2 | TYR | D | 388 | 17.176 | 87.532 | 39.291 | 1.00 | 30.81 | C |
| ATOM | 12941 | CE1 | TYR | D | 388 | 16.565 | 86.590 | 41.856 | 1.00 | 30.28 | C |
| ATOM | 12942 | CE2 | TYR | D | 388 | 16.087 | 86.670 | 39.487 | 1.00 | 30.92 | C |
| ATOM | 12943 | CZ | TYR | D | 388 | 15.790 | 86.204 | 40.777 | 1.00 | 30.38 | C |
| ATOM | 12944 | OH | TYR | D | 388 | 14.715 | 85.352 | 40.959 | 1.00 | 29.37 | O |
| ATOM | 12945 | N | THR | D | 389 | 20.722 | 86.020 | 39.872 | 1.00 | 27.81 | N |
| ATOM | 12946 | CA | THR | D | 389 | 21.103 | 84.911 | 39.002 | 1.00 | 27.06 | C |
| ATOM | 12947 | C | THR | D | 389 | 20.087 | 83.784 | 38.884 | 1.00 | 25.64 | C |
| ATOM | 12948 | O | THR | D | 389 | 20.275 | 82.863 | 38.089 | 1.00 | 24.32 | O |
| ATOM | 12949 | CB | THR | D | 389 | 22.473 | 84.305 | 39.458 | 1.00 | 28.10 | C |
| ATOM | 12950 | OG1 | THR | D | 389 | 22.360 | 83.718 | 40.774 | 1.00 | 28.70 | O |
| ATOM | 12951 | CG2 | THR | D | 389 | 23.528 | 85.414 | 39.526 | 1.00 | 27.72 | C |
| ATOM | 12952 | N | ALA | D | 390 | 19.001 | 83.865 | 39.649 | 1.00 | 24.81 | N |
| ATOM | 12953 | CA | ALA | D | 390 | 17.995 | 82.799 | 39.625 | 1.00 | 25.44 | C |

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ATOM   12954  C    ALA D 390      17.055  82.732  38.397  1.00 26.10       C
ATOM   12955  O    ALA D 390      16.190  81.852  38.306  1.00 26.25       O
ATOM   12956  CB   ALA D 390      17.188  82.846  40.914  1.00 23.09       C
ATOM   12957  N    THR D 391      17.198  83.655  37.449  1.00 26.76       N
ATOM   12958  CA   THR D 391      16.353  83.600  36.264  1.00 27.37       C
ATOM   12959  C    THR D 391      16.798  82.303  35.559  1.00 25.80       C
ATOM   12960  O    THR D 391      16.004  81.597  34.935  1.00 28.19       O
ATOM   12961  CB   THR D 391      16.585  84.831  35.337  1.00 29.29       C
ATOM   12962  OG1  THR D 391      16.596  86.039  36.116  1.00 29.94       O
ATOM   12963  CG2  THR D 391      15.458  84.935  34.351  1.00 31.24       C
ATOM   12964  N    LYS D 392      18.080  81.992  35.685  1.00 24.26       N
ATOM   12965  CA   LYS D 392      18.628  80.784  35.107  1.00 25.91       C
ATOM   12966  C    LYS D 392      18.517  79.741  36.207  1.00 23.72       C
ATOM   12967  O    LYS D 392      19.512  79.308  36.760  1.00 22.85       O
ATOM   12968  CB   LYS D 392      20.084  80.983  34.751  1.00 26.76       C
ATOM   12969  CG   LYS D 392      20.273  81.954  33.589  1.00 32.05       C
ATOM   12970  CD   LYS D 392      21.035  81.299  32.463  1.00 34.74       C
ATOM   12971  CE   LYS D 392      22.438  80.936  32.907  1.00 37.01       C
ATOM   12972  NZ   LYS D 392      23.169  80.142  31.881  1.00 38.89       N
ATOM   12973  N    HIS D 393      17.281  79.362  36.507  1.00 22.94       N
ATOM   12974  CA   HIS D 393      17.006  78.411  37.578  1.00 23.26       C
ATOM   12975  C    HIS D 393      17.726  77.045  37.600  1.00 22.59       C
ATOM   12976  O    HIS D 393      17.990  76.534  38.693  1.00 22.00       O
ATOM   12977  CB   HIS D 393      15.483  78.238  37.688  1.00 23.64       C
ATOM   12978  CG   HIS D 393      14.817  77.804  36.418  1.00 24.79       C
ATOM   12979  ND1  HIS D 393      13.669  78.408  35.933  1.00 25.00       N
ATOM   12980  CD2  HIS D 393      15.093  76.782  35.565  1.00 26.54       C
ATOM   12981  CE1  HIS D 393      13.268  77.776  34.841  1.00 26.07       C
ATOM   12982  NE2  HIS D 393      14.116  76.787  34.593  1.00 26.50       N
ATOM   12983  N    GLN D 394      18.066  76.449  36.446  1.00 22.44       N
ATOM   12984  CA   GLN D 394      18.737  75.138  36.469  1.00 22.34       C
ATOM   12985  C    GLN D 394      20.136  75.201  37.125  1.00 24.06       C
ATOM   12986  O    GLN D 394      20.459  74.442  38.051  1.00 23.02       O
ATOM   12987  CB   GLN D 394      18.885  74.519  35.056  1.00 22.94       C
ATOM   12988  CG   GLN D 394      17.639  74.471  34.165  1.00 22.66       C
ATOM   12989  CD   GLN D 394      16.555  73.524  34.683  1.00 22.21       C
ATOM   12990  OE1  GLN D 394      16.626  73.038  35.812  1.00 19.80       O
ATOM   12991  NE2  GLN D 394      15.524  73.298  33.862  1.00 22.20       N
ATOM   12992  N    ARG D 395      20.993  76.100  36.643  1.00 22.90       N
ATOM   12993  CA   ARG D 395      22.319  76.200  37.253  1.00 21.99       C
ATOM   12994  C    ARG D 395      22.185  76.706  38.702  1.00 19.41       C
ATOM   12995  O    ARG D 395      22.992  76.379  39.548  1.00 21.33       O
ATOM   12996  CB   ARG D 395      23.187  77.193  36.464  1.00 22.32       C
ATOM   12997  CG   ARG D 395      22.516  78.564  36.288  1.00 25.01       C
ATOM   12998  CD   ARG D 395      23.574  79.693  36.282  1.00 23.96       C
ATOM   12999  NE   ARG D 395      24.140  79.868  37.625  1.00 26.28       N
ATOM   13000  CZ   ARG D 395      23.462  80.323  38.681  1.00 25.83       C
ATOM   13001  NH1  ARG D 395      22.176  80.676  38.578  1.00 26.16       N
ATOM   13002  NH2  ARG D 395      24.058  80.403  39.868  1.00 27.08       N
ATOM   13003  N    GLU D 396      21.163  77.500  38.986  1.00 21.63       N
ATOM   13004  CA   GLU D 396      20.985  78.053  40.325  1.00 20.60       C
ATOM   13005  C    GLU D 396      20.862  76.963  41.370  1.00 22.11       C
ATOM   13006  O    GLU D 396      21.388  77.090  42.473  1.00 22.03       O
ATOM   13007  CB   GLU D 396      19.751  78.946  40.386  1.00 21.65       C
ATOM   13008  CG   GLU D 396      19.483  79.655  41.714  1.00 22.73       C
ATOM   13009  CD   GLU D 396      20.288  80.957  41.950  1.00 27.16       C
ATOM   13010  OE1  GLU D 396      20.926  81.482  41.010  1.00 27.97       O
ATOM   13011  OE2  GLU D 396      20.256  81.471  43.093  1.00 27.80       O
ATOM   13012  N    VAL D 397      20.138  75.906  41.021  1.00 21.24       N
ATOM   13013  CA   VAL D 397      19.933  74.813  41.953  1.00 21.19       C
ATOM   13014  C    VAL D 397      20.945  73.665  41.785  1.00 19.08       C
ATOM   13015  O    VAL D 397      20.811  72.618  42.406  1.00 22.07       O
ATOM   13016  CB   VAL D 397      18.483  74.325  41.840  1.00 20.08       C
ATOM   13017  CG1  VAL D 397      18.215  73.835  40.437  1.00 19.07       C
ATOM   13018  CG2  VAL D 397      18.255  73.200  42.833  1.00 25.10       C
ATOM   13019  N    GLY D 398      21.999  73.896  40.997  1.00 19.43       N
ATOM   13020  CA   GLY D 398      23.044  72.897  40.813  1.00 15.65       C
ATOM   13021  C    GLY D 398      23.059  71.899  39.649  1.00 18.77       C
ATOM   13022  O    GLY D 398      23.822  70.934  39.678  1.00 15.76       O
ATOM   13023  N    ALA D 399      22.237  72.095  38.618  1.00 18.94       N
ATOM   13024  CA   ALA D 399      22.269  71.174  37.480  1.00 18.42       C
ATOM   13025  C    ALA D 399      23.680  71.079  36.960  1.00 19.69       C
ATOM   13026  O    ALA D 399      24.135  70.033  36.528  1.00 18.00       O
ATOM   13027  CB   ALA D 399      21.369  71.675  36.366  1.00 18.34       C
ATOM   13028  N    GLY D 400      24.406  72.193  36.986  1.00 20.06       N
ATOM   13029  CA   GLY D 400      25.766  72.113  36.466  1.00 20.21       C
ATOM   13030  C    GLY D 400      26.751  71.430  37.392  1.00 20.30       C
ATOM   13031  O    GLY D 400      27.733  70.787  36.957  1.00 20.35       O
ATOM   13032  N    TYR D 401      26.501  71.562  38.690  1.00 20.50       N
ATOM   13033  CA   TYR D 401      27.373  70.931  39.664  1.00 21.03       C
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ATOM   13034   C    TYR D 401    27.212  69.425  39.552  1.00 21.20        C
ATOM   13035   O    TYR D 401    28.175  68.660  39.541  1.00 21.11        O
ATOM   13036   CB   TYR D 401    26.986  71.395  41.054  1.00 22.02        C
ATOM   13037   CG   TYR D 401    27.796  70.730  42.123  1.00 22.36        C
ATOM   13038   CD1  TYR D 401    29.150  71.077  42.336  1.00 22.17        C
ATOM   13039   CD2  TYR D 401    27.230  69.753  42.924  1.00 20.89        C
ATOM   13040   CE1  TYR D 401    29.911  70.455  43.344  1.00 21.95        C
ATOM   13041   CE2  TYR D 401    27.966  69.110  43.921  1.00 22.63        C
ATOM   13042   CZ   TYR D 401    29.306  69.463  44.136  1.00 24.28        C
ATOM   13043   OH   TYR D 401    29.991  68.819  45.131  1.00 24.30        O
ATOM   13044   N    PHE D 402    25.961  68.995  39.464  1.00 20.85        N
ATOM   13045   CA   PHE D 402    25.712  67.571  39.343  1.00 20.96        C
ATOM   13046   C    PHE D 402    26.180  67.001  37.995  1.00 18.53        C
ATOM   13047   O    PHE D 402    26.621  65.862  37.926  1.00 18.41        O
ATOM   13048   CB   PHE D 402    24.232  67.315  39.649  1.00 19.47        C
ATOM   13049   CG   PHE D 402    23.968  67.255  41.130  1.00 18.51        C
ATOM   13050   CD1  PHE D 402    24.164  66.055  41.825  1.00 18.01        C
ATOM   13051   CD2  PHE D 402    23.639  68.395  41.849  1.00 18.86        C
ATOM   13052   CE1  PHE D 402    24.040  66.004  43.213  1.00 17.24        C
ATOM   13053   CE2  PHE D 402    23.513  68.348  43.250  1.00 17.21        C
ATOM   13054   CZ   PHE D 402    23.718  67.146  43.923  1.00 17.35        C
ATOM   13055   N    ASP D 403    26.123  67.804  36.943  1.00 20.28        N
ATOM   13056   CA   ASP D 403    26.645  67.340  35.672  1.00 22.10        C
ATOM   13057   C    ASP D 403    28.155  67.059  35.899  1.00 21.27        C
ATOM   13058   O    ASP D 403    28.701  66.124  35.347  1.00 21.30        O
ATOM   13059   CB   ASP D 403    26.485  68.414  34.589  1.00 21.90        C
ATOM   13060   CG   ASP D 403    25.151  68.319  33.853  1.00 25.04        C
ATOM   13061   OD1  ASP D 403    24.379  67.342  34.096  1.00 23.49        O
ATOM   13062   OD2  ASP D 403    24.890  69.225  33.030  1.00 24.32        O
ATOM   13063   N    ARG D 404    28.814  67.877  36.722  1.00 22.15        N
ATOM   13064   CA   ARG D 404    30.256  67.679  36.965  1.00 22.34        C
ATOM   13065   C    ARG D 404    30.524  66.379  37.691  1.00 21.62        C
ATOM   13066   O    ARG D 404    31.456  65.647  37.386  1.00 20.46        O
ATOM   13067   CB   ARG D 404    30.857  68.851  37.750  1.00 26.96        C
ATOM   13068   CG   ARG D 404    32.354  68.638  38.038  1.00 31.59        C
ATOM   13069   CD   ARG D 404    33.183  68.730  36.770  1.00 35.90        C
ATOM   13070   NE   ARG D 404    33.672  70.094  36.578  1.00 41.18        N
ATOM   13071   CZ   ARG D 404    34.811  70.562  37.096  1.00 41.54        C
ATOM   13072   NH1  ARG D 404    35.591  69.776  37.830  1.00 41.38        N
ATOM   13073   NH2  ARG D 404    35.159  71.823  36.893  1.00 42.09        N
ATOM   13074   N    ILE D 405    29.702  66.087  38.700  1.00 22.45        N
ATOM   13075   CA   ILE D 405    29.838  64.833  39.396  1.00 19.30        C
ATOM   13076   C    ILE D 405    29.592  63.691  38.394  1.00 20.43        C
ATOM   13077   O    ILE D 405    30.270  62.666  38.417  1.00 20.85        O
ATOM   13078   CB   ILE D 405    28.753  64.705  40.505  1.00 19.72        C
ATOM   13079   CG1  ILE D 405    28.910  65.827  41.550  1.00 19.59        C
ATOM   13080   CG2  ILE D 405    28.770  63.287  41.070  1.00 19.34        C
ATOM   13081   CD1  ILE D 405    28.074  65.608  42.811  1.00 19.79        C
ATOM   13082   N    ALA D 406    28.569  63.833  37.548  1.00 21.35        N
ATOM   13083   CA   ALA D 406    28.276  62.740  36.606  1.00 22.19        C
ATOM   13084   C    ALA D 406    29.461  62.505  35.683  1.00 21.86        C
ATOM   13085   O    ALA D 406    29.862  61.366  35.455  1.00 21.70        O
ATOM   13086   CB   ALA D 406    27.031  63.049  35.776  1.00 19.91        C
ATOM   13087   N    THR D 407    30.028  63.587  35.163  1.00 23.80        N
ATOM   13088   CA   THR D 407    31.167  63.411  34.272  1.00 25.38        C
ATOM   13089   C    THR D 407    32.447  63.032  34.989  1.00 25.29        C
ATOM   13090   O    THR D 407    33.369  62.485  34.382  1.00 26.10        O
ATOM   13091   CB   THR D 407    31.374  64.626  33.334  1.00 25.68        C
ATOM   13092   OG1  THR D 407    31.366  65.873  34.052  1.00 24.55        O
ATOM   13093   CG2  THR D 407    30.243  64.653  32.319  1.00 26.65        C
ATOM   13094   N    THR D 408    32.503  63.233  36.298  1.00 25.99        N
ATOM   13095   CA   THR D 408    33.717  62.830  37.004  1.00 24.62        C
ATOM   13096   C    THR D 408    33.644  61.337  37.140  1.00 25.20        C
ATOM   13097   O    THR D 408    34.654  60.631  37.074  1.00 25.55        O
ATOM   13098   CB   THR D 408    33.830  63.478  38.385  1.00 22.85        C
ATOM   13099   OG1  THR D 408    33.928  64.888  38.231  1.00 25.77        O
ATOM   13100   CG2  THR D 408    35.067  62.998  39.101  1.00 26.29        C
ATOM   13101   N    VAL D 409    32.426  60.835  37.328  1.00 24.62        N
ATOM   13102   CA   VAL D 409    32.235  59.405  37.450  1.00 23.03        C
ATOM   13103   C    VAL D 409    32.332  58.724  36.076  1.00 23.89        C
ATOM   13104   O    VAL D 409    32.793  57.589  35.961  1.00 24.52        O
ATOM   13105   CB   VAL D 409    30.855  59.092  38.033  1.00 22.74        C
ATOM   13106   CG1  VAL D 409    30.664  57.603  38.061  1.00 23.40        C
ATOM   13107   CG2  VAL D 409    30.723  59.678  39.433  1.00 21.50        C
ATOM   13108   N    ASP D 410    31.880  59.405  35.038  1.00 25.28        N
ATOM   13109   CA   ASP D 410    31.927  58.807  33.693  1.00 27.64        C
ATOM   13110   C    ASP D 410    31.908  59.943  32.716  1.00 27.14        C
ATOM   13111   O    ASP D 410    30.854  60.485  32.397  1.00 27.05        O
ATOM   13112   CB   ASP D 410    30.725  57.874  33.489  1.00 29.68        C
ATOM   13113   CG   ASP D 410    30.541  57.445  32.032  1.00 32.47        C
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| ATOM | 13114 | OD1 | ASP | D | 410 | 31.444 | 57.697 | 31.182 | 1.00 | 32.39 | O |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 13115 | OD2 | ASP | D | 410 | 29.470 | 56.842 | 31.752 | 1.00 | 34.33 | O |
| ATOM | 13116 | N   | PRO | D | 411 | 33.101 | 60.348 | 32.232 | 1.00 | 28.46 | N |
| ATOM | 13117 | CA  | PRO | D | 411 | 33.163 | 61.469 | 31.280 | 1.00 | 29.13 | C |
| ATOM | 13118 | C   | PRO | D | 411 | 32.323 | 61.259 | 30.019 | 1.00 | 29.97 | C |
| ATOM | 13119 | O   | PRO | D | 411 | 31.914 | 62.223 | 29.365 | 1.00 | 30.36 | O |
| ATOM | 13120 | CB  | PRO | D | 411 | 34.667 | 61.627 | 30.978 | 1.00 | 28.71 | C |
| ATOM | 13121 | CG  | PRO | D | 411 | 35.324 | 60.355 | 31.532 | 1.00 | 29.66 | C |
| ATOM | 13122 | CD  | PRO | D | 411 | 34.441 | 59.871 | 32.643 | 1.00 | 29.29 | C |
| ATOM | 13123 | N   | ASN | D | 412 | 32.044 | 59.999 | 29.705 | 1.00 | 29.24 | N |
| ATOM | 13124 | CA  | ASN | D | 412 | 31.268 | 59.676 | 28.512 | 1.00 | 30.83 | C |
| ATOM | 13125 | C   | ASN | D | 412 | 29.764 | 59.515 | 28.694 | 1.00 | 30.08 | C |
| ATOM | 13126 | O   | ASN | D | 412 | 29.070 | 59.168 | 27.749 | 1.00 | 30.17 | O |
| ATOM | 13127 | CB  | ASN | D | 412 | 31.847 | 58.426 | 27.857 | 1.00 | 32.41 | C |
| ATOM | 13128 | CG  | ASN | D | 412 | 33.265 | 58.646 | 27.416 | 1.00 | 35.16 | C |
| ATOM | 13129 | OD1 | ASN | D | 412 | 33.564 | 59.671 | 26.787 | 1.00 | 36.54 | O |
| ATOM | 13130 | ND2 | ASN | D | 412 | 34.156 | 57.715 | 27.742 | 1.00 | 36.69 | N |
| ATOM | 13131 | N   | SER | D | 413 | 29.255 | 59.786 | 29.889 | 1.00 | 29.20 | N |
| ATOM | 13132 | CA  | SER | D | 413 | 27.827 | 59.643 | 30.114 | 1.00 | 27.97 | C |
| ATOM | 13133 | C   | SER | D | 413 | 26.985 | 60.426 | 29.100 | 1.00 | 28.62 | C |
| ATOM | 13134 | O   | SER | D | 413 | 27.264 | 61.593 | 28.798 | 1.00 | 26.98 | O |
| ATOM | 13135 | CB  | SER | D | 413 | 27.463 | 60.114 | 31.521 | 1.00 | 29.40 | C |
| ATOM | 13136 | OG  | SER | D | 413 | 26.122 | 60.575 | 31.552 | 1.00 | 27.01 | O |
| ATOM | 13137 | N   | SER | D | 414 | 25.928 | 59.782 | 28.598 | 1.00 | 28.46 | N |
| ATOM | 13138 | CA  | SER | D | 414 | 25.056 | 60.429 | 27.631 | 1.00 | 28.73 | C |
| ATOM | 13139 | C   | SER | D | 414 | 23.782 | 61.006 | 28.256 | 1.00 | 28.85 | C |
| ATOM | 13140 | O   | SER | D | 414 | 22.847 | 61.367 | 27.546 | 1.00 | 28.16 | O |
| ATOM | 13141 | CB  | SER | D | 414 | 24.725 | 59.458 | 26.492 | 1.00 | 28.18 | C |
| ATOM | 13142 | OG  | SER | D | 414 | 24.427 | 58.168 | 26.969 | 1.00 | 30.92 | O |
| ATOM | 13143 | N   | THR | D | 415 | 23.785 | 61.132 | 29.584 | 1.00 | 28.67 | N |
| ATOM | 13144 | CA  | THR | D | 415 | 22.636 | 61.635 | 30.315 | 1.00 | 27.99 | C |
| ATOM | 13145 | C   | THR | D | 415 | 22.887 | 62.865 | 31.200 | 1.00 | 27.32 | C |
| ATOM | 13146 | O   | THR | D | 415 | 22.266 | 63.002 | 32.272 | 1.00 | 27.15 | O |
| ATOM | 13147 | CB  | THR | D | 415 | 22.027 | 60.515 | 31.206 | 1.00 | 27.74 | C |
| ATOM | 13148 | OG1 | THR | D | 415 | 22.953 | 60.148 | 32.237 | 1.00 | 28.80 | O |
| ATOM | 13149 | CG2 | THR | D | 415 | 21.712 | 59.252 | 30.371 | 1.00 | 28.73 | C |
| ATOM | 13150 | N   | THR | D | 416 | 23.782 | 63.755 | 30.779 | 1.00 | 26.62 | N |
| ATOM | 13151 | CA  | THR | D | 416 | 24.041 | 64.953 | 31.571 | 1.00 | 25.44 | C |
| ATOM | 13152 | C   | THR | D | 416 | 22.901 | 65.885 | 31.233 | 1.00 | 25.08 | C |
| ATOM | 13153 | O   | THR | D | 416 | 22.251 | 65.695 | 30.202 | 1.00 | 26.27 | O |
| ATOM | 13154 | CB  | THR | D | 416 | 25.399 | 65.601 | 31.234 | 1.00 | 25.73 | C |
| ATOM | 13155 | OG1 | THR | D | 416 | 25.440 | 65.939 | 29.844 | 1.00 | 29.27 | O |
| ATOM | 13156 | CG2 | THR | D | 416 | 26.511 | 64.651 | 31.556 | 1.00 | 26.31 | C |
| ATOM | 13157 | N   | ALA | D | 417 | 22.685 | 66.897 | 32.068 | 1.00 | 24.24 | N |
| ATOM | 13158 | CA  | ALA | D | 417 | 21.539 | 67.800 | 31.981 | 1.00 | 25.98 | C |
| ATOM | 13159 | C   | ALA | D | 417 | 21.547 | 69.158 | 31.304 | 1.00 | 27.83 | C |
| ATOM | 13160 | O   | ALA | D | 417 | 20.563 | 69.506 | 30.645 | 1.00 | 29.79 | O |
| ATOM | 13161 | CB  | ALA | D | 417 | 20.969 | 68.001 | 33.405 | 1.00 | 25.81 | C |
| ATOM | 13162 | N   | LEU | D | 418 | 22.601 | 69.954 | 31.481 | 1.00 | 29.08 | N |
| ATOM | 13163 | CA  | LEU | D | 418 | 22.600 | 71.299 | 30.889 | 1.00 | 28.52 | C |
| ATOM | 13164 | C   | LEU | D | 418 | 22.665 | 71.364 | 29.336 | 1.00 | 28.88 | C |
| ATOM | 13165 | O   | LEU | D | 418 | 22.070 | 72.264 | 28.715 | 1.00 | 28.33 | O |
| ATOM | 13166 | CB  | LEU | D | 418 | 23.713 | 72.149 | 31.548 | 1.00 | 28.58 | C |
| ATOM | 13167 | CG  | LEU | D | 418 | 23.417 | 72.497 | 33.024 | 1.00 | 27.15 | C |
| ATOM | 13168 | CD1 | LEU | D | 418 | 24.489 | 73.403 | 33.596 | 1.00 | 27.15 | C |
| ATOM | 13169 | CD2 | LEU | D | 418 | 22.038 | 73.173 | 33.136 | 1.00 | 27.32 | C |
| ATOM | 13170 | N   | THR | D | 419 | 23.373 | 70.412 | 28.732 | 1.00 | 28.42 | N |
| ATOM | 13171 | CA  | THR | D | 419 | 23.506 | 70.327 | 27.280 | 1.00 | 29.68 | C |
| ATOM | 13172 | C   | THR | D | 419 | 22.184 | 69.876 | 26.702 | 1.00 | 30.61 | C |
| ATOM | 13173 | O   | THR | D | 419 | 21.660 | 68.803 | 27.061 | 1.00 | 28.04 | O |
| ATOM | 13174 | CB  | THR | D | 419 | 24.560 | 69.314 | 26.858 | 1.00 | 31.06 | C |
| ATOM | 13175 | OG1 | THR | D | 419 | 25.828 | 69.701 | 27.391 | 1.00 | 31.26 | O |
| ATOM | 13176 | CG2 | THR | D | 419 | 24.661 | 69.256 | 25.332 | 1.00 | 32.38 | C |
| ATOM | 13177 | N   | GLY | D | 420 | 21.648 | 70.705 | 25.814 | 1.00 | 29.67 | N |
| ATOM | 13178 | CA  | GLY | D | 420 | 20.381 | 70.384 | 25.202 | 1.00 | 29.89 | C |
| ATOM | 13179 | C   | GLY | D | 420 | 19.235 | 71.022 | 25.958 | 1.00 | 30.12 | C |
| ATOM | 13180 | O   | GLY | D | 420 | 18.093 | 70.934 | 25.510 | 1.00 | 29.28 | O |
| ATOM | 13181 | N   | SER | D | 421 | 19.528 | 71.672 | 27.092 | 1.00 | 29.04 | N |
| ATOM | 13182 | CA  | SER | D | 421 | 18.489 | 72.307 | 27.899 | 1.00 | 29.31 | C |
| ATOM | 13183 | C   | SER | D | 421 | 17.967 | 73.620 | 27.323 | 1.00 | 29.89 | C |
| ATOM | 13184 | O   | SER | D | 421 | 18.695 | 74.322 | 26.638 | 1.00 | 30.30 | O |
| ATOM | 13185 | CB  | SER | D | 421 | 19.014 | 72.589 | 29.302 | 1.00 | 29.44 | C |
| ATOM | 13186 | OG  | SER | D | 421 | 19.744 | 73.806 | 29.291 | 1.00 | 28.67 | O |
| ATOM | 13187 | N   | THR | D | 422 | 16.714 | 73.969 | 27.622 | 1.00 | 30.38 | N |
| ATOM | 13188 | CA  | THR | D | 422 | 16.178 | 75.224 | 27.130 | 1.00 | 30.13 | C |
| ATOM | 13189 | C   | THR | D | 422 | 16.884 | 76.369 | 27.840 | 1.00 | 31.12 | C |
| ATOM | 13190 | O   | THR | D | 422 | 16.840 | 77.512 | 27.371 | 1.00 | 30.86 | O |
| ATOM | 13191 | CB  | THR | D | 422 | 14.632 | 75.377 | 27.358 | 1.00 | 30.05 | C |
| ATOM | 13192 | OG1 | THR | D | 422 | 14.329 | 75.358 | 28.764 | 1.00 | 29.41 | O |
| ATOM | 13193 | CG2 | THR | D | 422 | 13.869 | 74.276 | 26.626 | 1.00 | 29.44 | C |

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ATOM   13194  N   GLU D 423      17.539  76.082  28.970  1.00 30.84           N
ATOM   13195  CA  GLU D 423      18.226  77.161  29.678  1.00 30.83           C
ATOM   13196  C   GLU D 423      19.422  77.590  28.818  1.00 32.12           C
ATOM   13197  O   GLU D 423      19.609  78.781  28.516  1.00 31.19           O
ATOM   13198  CB  GLU D 423      18.670  76.704  31.078  1.00 28.69           C
ATOM   13199  CG  GLU D 423      19.657  77.633  31.744  1.00 27.83           C
ATOM   13200  CD  GLU D 423      19.648  77.512  33.254  1.00 26.10           C
ATOM   13201  OE1 GLU D 423      18.586  77.752  33.857  1.00 29.52           O
ATOM   13202  OE2 GLU D 423      20.694  77.182  33.835  1.00 23.55           O
ATOM   13203  N   GLU D 424      20.202  76.604  28.399  1.00 32.40           N
ATOM   13204  CA  GLU D 424      21.360  76.841  27.543  1.00 34.14           C
ATOM   13205  C   GLU D 424      20.957  77.396  26.139  1.00 34.69           C
ATOM   13206  O   GLU D 424      21.714  78.144  25.492  1.00 33.94           O
ATOM   13207  CB  GLU D 424      22.145  75.533  27.434  1.00 34.86           C
ATOM   13208  CG  GLU D 424      23.023  75.399  26.206  1.00 38.84           C
ATOM   13209  CD  GLU D 424      23.716  74.053  26.149  1.00 40.68           C
ATOM   13210  OE1 GLU D 424      24.616  73.822  26.988  1.00 42.37           O
ATOM   13211  OE2 GLU D 424      23.349  73.225  25.279  1.00 40.23           O
ATOM   13212  N   GLY D 425      19.755  77.071  25.676  1.00 34.98           N
ATOM   13213  CA  GLY D 425      19.337  77.566  24.373  1.00 34.57           C
ATOM   13214  C   GLY D 425      18.458  78.815  24.333  1.00 35.15           C
ATOM   13215  O   GLY D 425      18.273  79.397  23.255  1.00 34.26           O
ATOM   13216  N   GLN D 426      17.928  79.243  25.482  1.00 33.57           N
ATOM   13217  CA  GLN D 426      17.044  80.396  25.513  1.00 33.89           C
ATOM   13218  C   GLN D 426      17.421  81.504  26.494  1.00 35.76           C
ATOM   13219  O   GLN D 426      16.797  82.565  26.484  1.00 35.82           O
ATOM   13220  CB  GLN D 426      15.616  79.938  25.840  1.00 32.91           C
ATOM   13221  CG  GLN D 426      15.083  78.871  24.879  1.00 28.49           C
ATOM   13222  CD  GLN D 426      13.641  78.497  25.150  1.00 30.81           C
ATOM   13223  OE1 GLN D 426      12.832  79.308  25.660  1.00 26.82           O
ATOM   13224  NE2 GLN D 426      13.288  77.262  24.790  1.00 29.27           N
ATOM   13225  N   PHE D 427      18.416  81.266  27.349  1.00 37.32           N
ATOM   13226  CA  PHE D 427      18.792  82.272  28.345  1.00 38.05           C
ATOM   13227  C   PHE D 427      20.188  82.856  28.175  1.00 38.90           C
ATOM   13228  O   PHE D 427      20.303  84.100  28.231  1.00 40.24           O
ATOM   13229  CB  PHE D 427      18.618  81.701  29.763  1.00 37.13           C
ATOM   13230  CG  PHE D 427      17.181  81.507  30.152  1.00 37.97           C
ATOM   13231  CD1 PHE D 427      16.392  80.565  29.489  1.00 38.12           C
ATOM   13232  CD2 PHE D 427      16.597  82.293  31.137  1.00 37.45           C
ATOM   13233  CE1 PHE D 427      15.031  80.416  29.800  1.00 38.31           C
ATOM   13234  CE2 PHE D 427      15.233  82.156  31.465  1.00 37.42           C
ATOM   13235  CZ  PHE D 427      14.449  81.215  30.793  1.00 38.88           C
TER    13236      PHE D 427
HETATM13237 MG    MG  A 451      20.130  44.536  51.852  1.00 21.10          MG
HETATM13238 MG    MG  B 452       5.041  57.848  80.250  1.00 27.97          MG
HETATM13239 MG    MG  C 453       8.296  67.957  37.655  1.00 32.36          MG
HETATM13240 MG    MG  D 454      10.773  84.273  67.893  1.00 43.69          MG
HETATM13241  C1  PYR A 500      19.340  39.213  53.566  1.00 33.09           C
HETATM13242  O1  PYR A 500      19.971  38.334  54.174  1.00 31.29           O
HETATM13243  O2  PYR A 500      19.568  40.450  53.609  1.00 34.18           O
HETATM13244  C2  PYR A 500      18.283  38.630  52.717  1.00 33.01           C
HETATM13245  O3  PYR A 500      18.136  37.405  52.580  1.00 33.52           O
HETATM13246  C3  PYR A 500      17.401  39.650  52.032  1.00 28.19           C
HETATM13247  C1  PYR B 500       6.861  53.686  83.487  1.00 29.79           C
HETATM13248  O1  PYR B 500       6.564  52.535  83.867  1.00 27.23           O
HETATM13249  O2  PYR B 500       6.291  54.338  82.578  1.00 30.97           O
HETATM13250  C2  PYR B 500       7.835  54.400  84.334  1.00 28.54           C
HETATM13251  O3  PYR B 500       8.267  53.793  85.321  1.00 31.54           O
HETATM13252  C3  PYR B 500       8.271  55.812  83.987  1.00 23.93           C
HETATM13253  C1  PYR C 500       9.270  72.555  34.488  1.00 33.15           C
HETATM13254  O1  PYR C 500       8.623  73.499  33.963  1.00 30.81           O
HETATM13255  O2  PYR C 500       8.834  71.753  35.346  1.00 32.95           O
HETATM13256  C2  PYR C 500      10.648  72.351  34.028  1.00 31.27           C
HETATM13257  O3  PYR C 500      11.041  73.071  33.117  1.00 32.07           O
HETATM13258  C3  PYR C 500      11.530  71.317  34.677  1.00 28.62           C
HETATM13259  C1  PYR D 500       8.606  89.242  65.911  1.00 33.59           C
HETATM13260  O1  PYR D 500       9.066  90.287  65.420  1.00 33.04           O
HETATM13261  O2  PYR D 500       9.179  88.131  65.924  1.00 35.21           O
HETATM13262  C2  PYR D 500       7.275  89.361  66.519  1.00 33.83           C
HETATM13263  O3  PYR D 500       6.545  90.336  66.374  1.00 34.89           O
HETATM13264  C3  PYR D 500       6.874  88.180  67.344  1.00 31.77           C
HETATM13265  O   HOH   1001     15.054  57.079  43.996  1.00 15.14           O
HETATM13266  O   HOH   1002      2.213  51.154  52.301  1.00 12.36           O
HETATM13267  O   HOH   1003     -0.176  62.730  63.346  1.00 14.61           O
HETATM13268  O   HOH   1004     18.290  54.433  52.565  1.00 14.63           O
HETATM13269  O   HOH   1005      7.977  54.528  50.743  1.00 10.39           O
HETATM13270  O   HOH   1006     18.142  65.802  66.577  1.00 14.05           O
HETATM13271  O   HOH   1007      9.743  54.447  46.748  1.00 15.36           O
HETATM13272  O   HOH   1008     21.261  64.339  72.795  1.00 16.80           O
HETATM13273  O   HOH   1009     15.043  66.439  71.484  1.00 13.57           O
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|---|---|---|---|---|---|---|---|---|---|
| HETATM13274 | O | HOH | 1010 | 12.402 | 60.945 | 53.920 | 1.00 | 13.66 | O |
| HETATM13275 | O | HOH | 1011 | 2.728 | 54.953 | 50.674 | 1.00 | 12.95 | O |
| HETATM13276 | O | HOH | 1012 | 11.115 | 59.686 | 39.801 | 1.00 | 14.47 | O |
| HETATM13277 | O | HOH | 1013 | 13.352 | 57.134 | 78.821 | 1.00 | 11.82 | O |
| HETATM13278 | O | HOH | 1014 | 20.627 | 66.914 | 66.037 | 1.00 | 11.52 | O |
| HETATM13279 | O | HOH | 1015 | 12.702 | 69.341 | 73.781 | 1.00 | 13.70 | O |
| HETATM13280 | O | HOH | 1016 | 13.631 | 54.883 | 44.789 | 1.00 | 15.07 | O |
| HETATM13281 | O | HOH | 1017 | 20.129 | 67.692 | 70.611 | 1.00 | 12.34 | O |
| HETATM13282 | O | HOH | 1018 | 13.266 | 44.664 | 60.855 | 1.00 | 17.93 | O |
| HETATM13283 | O | HOH | 1019 | 15.053 | 59.053 | 46.129 | 1.00 | 12.28 | O |
| HETATM13284 | O | HOH | 1020 | 12.084 | 48.165 | 50.648 | 1.00 | 14.51 | O |
| HETATM13285 | O | HOH | 1021 | 4.928 | 62.853 | 71.371 | 1.00 | 12.68 | O |
| HETATM13286 | O | HOH | 1022 | 12.275 | 62.355 | 77.017 | 1.00 | 12.22 | O |
| HETATM13287 | O | HOH | 1023 | 12.446 | 55.364 | 47.216 | 1.00 | 12.51 | O |
| HETATM13288 | O | HOH | 1024 | 18.232 | 63.001 | 48.768 | 1.00 | 12.90 | O |
| HETATM13289 | O | HOH | 1025 | -1.597 | 68.560 | 65.683 | 1.00 | 16.35 | O |
| HETATM13290 | O | HOH | 1026 | 4.025 | 62.136 | 73.949 | 1.00 | 13.28 | O |
| HETATM13291 | O | HOH | 1027 | 2.482 | 49.290 | 56.361 | 1.00 | 13.88 | O |
| HETATM13292 | O | HOH | 1028 | 22.784 | 61.817 | 56.863 | 1.00 | 13.91 | O |
| HETATM13293 | O | HOH | 1029 | 23.294 | 63.486 | 50.605 | 1.00 | 17.30 | O |
| HETATM13294 | O | HOH | 1030 | -3.623 | 52.409 | 47.851 | 1.00 | 15.80 | O |
| HETATM13295 | O | HOH | 1031 | 21.732 | 59.941 | 72.068 | 1.00 | 12.97 | O |
| HETATM13296 | O | HOH | 1032 | 11.927 | 43.697 | 54.054 | 1.00 | 16.20 | O |
| HETATM13297 | O | HOH | 1033 | 11.405 | 41.327 | 52.310 | 1.00 | 16.39 | O |
| HETATM13298 | O | HOH | 1034 | 9.905 | 66.525 | 64.821 | 1.00 | 14.71 | O |
| HETATM13299 | O | HOH | 1035 | 1.457 | 60.766 | 52.971 | 1.00 | 16.45 | O |
| HETATM13300 | O | HOH | 1036 | 18.638 | 52.866 | 18.733 | 1.00 | 18.06 | O |
| HETATM13301 | O | HOH | 1037 | -7.465 | 56.711 | 59.694 | 1.00 | 14.40 | O |
| HETATM13302 | O | HOH | 1038 | 28.324 | 77.693 | 66.944 | 1.00 | 19.18 | O |
| HETATM13303 | O | HOH | 1039 | 8.821 | 70.673 | 74.949 | 1.00 | 18.29 | O |
| HETATM13304 | O | HOH | 1040 | 6.035 | 59.794 | 54.572 | 1.00 | 15.20 | O |
| HETATM13305 | O | HOH | 1041 | -2.295 | 73.958 | 59.962 | 1.00 | 15.81 | O |
| HETATM13306 | O | HOH | 1042 | 1.065 | 67.345 | 58.870 | 1.00 | 17.30 | O |
| HETATM13307 | O | HOH | 1043 | 13.117 | 74.479 | 67.321 | 1.00 | 10.49 | O |
| HETATM13308 | O | HOH | 1044 | -8.259 | 63.493 | 54.484 | 1.00 | 20.33 | O |
| HETATM13309 | O | HOH | 1045 | 26.404 | 66.825 | 46.974 | 1.00 | 18.01 | O |
| HETATM13310 | O | HOH | 1046 | 3.809 | 59.635 | 80.827 | 1.00 | 15.97 | O |
| HETATM13311 | O | HOH | 1047 | 14.230 | 49.822 | 73.186 | 1.00 | 15.91 | O |
| HETATM13312 | O | HOH | 1048 | 7.712 | 55.874 | 45.945 | 1.00 | 16.95 | O |
| HETATM13313 | O | HOH | 1049 | 3.909 | 45.137 | 59.792 | 1.00 | 19.74 | O |
| HETATM13314 | O | HOH | 1050 | 7.529 | 63.201 | 43.485 | 1.00 | 13.22 | O |
| HETATM13315 | O | HOH | 1051 | 6.643 | 79.793 | 68.237 | 1.00 | 18.72 | O |
| HETATM13316 | O | HOH | 1052 | 15.772 | 65.915 | 42.441 | 1.00 | 13.18 | O |
| HETATM13317 | O | HOH | 1053 | -5.706 | 50.756 | 65.780 | 1.00 | 20.29 | O |
| HETATM13318 | O | HOH | 1054 | 19.566 | 51.985 | 51.711 | 1.00 | 17.22 | O |
| HETATM13319 | O | HOH | 1055 | 5.570 | 63.315 | 35.900 | 1.00 | 15.48 | O |
| HETATM13320 | O | HOH | 1056 | 23.080 | 65.203 | 75.177 | 1.00 | 16.68 | O |
| HETATM13321 | O | HOH | 1057 | 7.490 | 65.794 | 25.299 | 1.00 | 17.63 | O |
| HETATM13322 | O | HOH | 1058 | 19.995 | 62.797 | 65.231 | 1.00 | 16.88 | O |
| HETATM13323 | O | HOH | 1059 | 24.041 | 46.421 | 48.495 | 1.00 | 18.64 | O |
| HETATM13324 | O | HOH | 1060 | -2.924 | 71.938 | 63.750 | 1.00 | 17.51 | O |
| HETATM13325 | O | HOH | 1061 | 7.865 | 47.147 | 38.279 | 1.00 | 20.85 | O |
| HETATM13326 | O | HOH | 1062 | 13.374 | 65.806 | 40.751 | 1.00 | 15.07 | O |
| HETATM13327 | O | HOH | 1063 | 9.635 | 61.533 | 78.066 | 1.00 | 12.97 | O |
| HETATM13328 | O | HOH | 1064 | 19.965 | 87.898 | 56.258 | 1.00 | 23.37 | O |
| HETATM13329 | O | HOH | 1065 | 19.957 | 64.347 | 54.003 | 1.00 | 19.46 | O |
| HETATM13330 | O | HOH | 1066 | -9.870 | 55.559 | 41.677 | 1.00 | 20.50 | O |
| HETATM13331 | O | HOH | 1067 | 19.090 | 36.819 | 26.658 | 1.00 | 22.57 | O |
| HETATM13332 | O | HOH | 1068 | 25.630 | 66.223 | 75.867 | 1.00 | 21.65 | O |
| HETATM13333 | O | HOH | 1069 | 31.224 | 68.875 | 61.022 | 1.00 | 21.21 | O |
| HETATM13334 | O | HOH | 1070 | 3.818 | 71.260 | 71.122 | 1.00 | 21.58 | O |
| HETATM13335 | O | HOH | 1071 | 11.534 | 60.775 | 21.851 | 1.00 | 18.74 | O |
| HETATM13336 | O | HOH | 1072 | 14.391 | 83.774 | 72.301 | 1.00 | 19.38 | O |
| HETATM13337 | O | HOH | 1073 | 24.697 | 79.891 | 86.506 | 1.00 | 18.22 | O |
| HETATM13338 | O | HOH | 1074 | 23.776 | 63.736 | 66.649 | 1.00 | 20.95 | O |
| HETATM13339 | O | HOH | 1075 | -9.154 | 58.337 | 57.950 | 1.00 | 17.45 | O |
| HETATM13340 | O | HOH | 1076 | 3.087 | 38.691 | 52.261 | 1.00 | 13.50 | O |
| HETATM13341 | O | HOH | 1077 | -1.900 | 48.845 | 49.484 | 1.00 | 18.89 | O |
| HETATM13342 | O | HOH | 1078 | 9.328 | 51.410 | 59.112 | 1.00 | 24.85 | O |
| HETATM13343 | O | HOH | 1079 | 18.812 | 62.505 | 35.740 | 1.00 | 21.64 | O |
| HETATM13344 | O | HOH | 1080 | 23.824 | 67.011 | 48.741 | 1.00 | 17.62 | O |
| HETATM13345 | O | HOH | 1081 | 6.336 | 72.871 | 44.522 | 1.00 | 17.08 | O |
| HETATM13346 | O | HOH | 1082 | 0.567 | 60.996 | 80.995 | 1.00 | 17.61 | O |
| HETATM13347 | O | HOH | 1083 | -2.755 | 59.419 | 59.321 | 1.00 | 21.56 | O |
| HETATM13348 | O | HOH | 1084 | 0.837 | 57.623 | 56.371 | 1.00 | 18.90 | O |
| HETATM13349 | O | HOH | 1085 | -12.448 | 62.699 | 40.614 | 1.00 | 19.01 | O |
| HETATM13350 | O | HOH | 1086 | 7.070 | 72.049 | 73.844 | 1.00 | 12.66 | O |
| HETATM13351 | O | HOH | 1087 | 32.841 | 67.596 | 51.227 | 1.00 | 24.88 | O |
| HETATM13352 | O | HOH | 1088 | 5.065 | 66.558 | 78.252 | 1.00 | 18.12 | O |
| HETATM13353 | O | HOH | 1089 | 5.394 | 75.414 | 54.306 | 1.00 | 17.66 | O |

| HETATM13354 | O | HOH | 1090 | 2.061 | 64.903 | 96.107 | 1.00 | 16.82 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13355 | O | HOH | 1091 | -6.362 | 68.273 | 46.900 | 1.00 | 18.44 | O |
| HETATM13356 | O | HOH | 1092 | 29.472 | 71.119 | 60.219 | 1.00 | 19.50 | O |
| HETATM13357 | O | HOH | 1093 | 11.785 | 44.711 | 43.380 | 1.00 | 17.82 | O |
| HETATM13358 | O | HOH | 1094 | 4.639 | 78.066 | 67.554 | 1.00 | 14.13 | O |
| HETATM13359 | O | HOH | 1095 | 20.046 | 59.021 | 50.107 | 1.00 | 14.48 | O |
| HETATM13360 | O | HOH | 1096 | 6.745 | 57.849 | 47.905 | 1.00 | 17.98 | O |
| HETATM13361 | O | HOH | 1097 | -8.064 | 51.393 | 64.581 | 1.00 | 17.34 | O |
| HETATM13362 | O | HOH | 1098 | 0.646 | 49.372 | 50.226 | 1.00 | 21.86 | O |
| HETATM13363 | O | HOH | 1099 | -3.100 | 56.177 | 55.881 | 1.00 | 18.82 | O |
| HETATM13364 | O | HOH | 1100 | 20.649 | 50.082 | 75.826 | 1.00 | 17.50 | O |
| HETATM13365 | O | HOH | 1101 | 6.475 | 52.799 | 73.227 | 1.00 | 15.52 | O |
| HETATM13366 | O | HOH | 1102 | 31.690 | 65.533 | 62.784 | 1.00 | 25.51 | O |
| HETATM13367 | O | HOH | 1103 | 30.612 | 63.087 | 63.159 | 1.00 | 16.00 | O |
| HETATM13368 | O | HOH | 1104 | -7.568 | 61.966 | 45.336 | 1.00 | 17.13 | O |
| HETATM13369 | O | HOH | 1105 | 17.840 | 59.508 | 45.927 | 1.00 | 15.68 | O |
| HETATM13370 | O | HOH | 1106 | 15.342 | 57.612 | 69.606 | 1.00 | 21.47 | O |
| HETATM13371 | O | HOH | 1107 | 28.567 | 64.930 | 59.876 | 1.00 | 27.60 | O |
| HETATM13372 | O | HOH | 1108 | 2.553 | 67.164 | 69.442 | 1.00 | 18.14 | O |
| HETATM13373 | O | HOH | 1109 | 22.796 | 57.435 | 83.139 | 1.00 | 17.54 | O |
| HETATM13374 | O | HOH | 1110 | 11.840 | 44.360 | 63.213 | 1.00 | 19.44 | O |
| HETATM13375 | O | HOH | 1111 | 23.321 | 35.701 | 36.939 | 1.00 | 18.09 | O |
| HETATM13376 | O | HOH | 1112 | 5.140 | 84.388 | 77.624 | 1.00 | 24.67 | O |
| HETATM13377 | O | HOH | 1113 | 30.464 | 61.551 | 60.594 | 1.00 | 22.15 | O |
| HETATM13378 | O | HOH | 1114 | 20.306 | 67.715 | 55.563 | 1.00 | 20.74 | O |
| HETATM13379 | O | HOH | 1115 | 32.502 | 56.326 | 64.774 | 1.00 | 18.17 | O |
| HETATM13380 | O | HOH | 1116 | 25.487 | 63.776 | 61.690 | 1.00 | 23.04 | O |
| HETATM13381 | O | HOH | 1117 | -10.970 | 59.638 | 32.138 | 1.00 | 23.67 | O |
| HETATM13382 | O | HOH | 1118 | -8.927 | 68.586 | 66.885 | 1.00 | 19.01 | O |
| HETATM13383 | O | HOH | 1119 | 21.537 | 54.536 | 73.793 | 1.00 | 23.23 | O |
| HETATM13384 | O | HOH | 1120 | 9.385 | 67.664 | 51.241 | 1.00 | 19.91 | O |
| HETATM13385 | O | HOH | 1121 | 10.048 | 77.734 | 73.777 | 1.00 | 21.34 | O |
| HETATM13386 | O | HOH | 1122 | 3.349 | 70.952 | 66.710 | 1.00 | 20.95 | O |
| HETATM13387 | O | HOH | 1123 | 14.006 | 75.304 | 52.116 | 1.00 | 19.53 | O |
| HETATM13388 | O | HOH | 1124 | 22.431 | 71.271 | 49.240 | 1.00 | 20.57 | O |
| HETATM13389 | O | HOH | 1125 | -8.311 | 57.231 | 39.719 | 1.00 | 23.45 | O |
| HETATM13390 | O | HOH | 1126 | 2.129 | 84.368 | 65.478 | 1.00 | 22.24 | O |
| HETATM13391 | O | HOH | 1127 | 8.903 | 58.960 | 66.967 | 1.00 | 17.58 | O |
| HETATM13392 | O | HOH | 1128 | -2.571 | 74.758 | 93.621 | 1.00 | 18.23 | O |
| HETATM13393 | O | HOH | 1129 | 3.662 | 59.154 | 92.178 | 1.00 | 19.73 | O |
| HETATM13394 | O | HOH | 1130 | -14.638 | 62.987 | 71.692 | 1.00 | 19.28 | O |
| HETATM13395 | O | HOH | 1131 | 1.375 | 53.927 | 20.247 | 1.00 | 22.95 | O |
| HETATM13396 | O | HOH | 1132 | 12.416 | 79.698 | 88.685 | 1.00 | 25.06 | O |
| HETATM13397 | O | HOH | 1133 | 7.469 | 66.734 | 87.218 | 1.00 | 16.81 | O |
| HETATM13398 | O | HOH | 1134 | 12.751 | 81.644 | 59.807 | 1.00 | 17.51 | O |
| HETATM13399 | O | HOH | 1135 | 15.046 | 57.497 | 66.927 | 1.00 | 16.52 | O |
| HETATM13400 | O | HOH | 1136 | 13.149 | 77.167 | 68.255 | 1.00 | 16.82 | O |
| HETATM13401 | O | HOH | 1137 | 14.682 | 71.013 | 72.918 | 1.00 | 16.76 | O |
| HETATM13402 | O | HOH | 1138 | 9.865 | 67.377 | 38.807 | 1.00 | 20.43 | O |
| HETATM13403 | O | HOH | 1139 | 10.328 | 49.678 | 23.612 | 1.00 | 14.26 | O |
| HETATM13404 | O | HOH | 1140 | 18.270 | 50.566 | 45.923 | 1.00 | 25.57 | O |
| HETATM13405 | O | HOH | 1141 | -4.203 | 54.588 | 52.142 | 1.00 | 17.72 | O |
| HETATM13406 | O | HOH | 1142 | -9.574 | 68.575 | 49.506 | 1.00 | 20.65 | O |
| HETATM13407 | O | HOH | 1143 | 4.151 | 65.313 | 62.802 | 1.00 | 18.93 | O |
| HETATM13408 | O | HOH | 1144 | -0.353 | 55.593 | 56.497 | 1.00 | 21.84 | O |
| HETATM13409 | O | HOH | 1145 | -8.210 | 72.454 | 65.396 | 1.00 | 24.29 | O |
| HETATM13410 | O | HOH | 1146 | 16.882 | 43.092 | 40.928 | 1.00 | 20.00 | O |
| HETATM13411 | O | HOH | 1147 | 3.141 | 53.128 | 89.209 | 1.00 | 20.83 | O |
| HETATM13412 | O | HOH | 1148 | 18.096 | 45.691 | 51.502 | 1.00 | 20.82 | O |
| HETATM13413 | O | HOH | 1149 | 29.726 | 67.950 | 84.579 | 1.00 | 19.95 | O |
| HETATM13414 | O | HOH | 1150 | 10.191 | 68.986 | 73.033 | 1.00 | 14.21 | O |
| HETATM13415 | O | HOH | 1151 | 4.786 | 36.003 | 64.167 | 1.00 | 23.05 | O |
| HETATM13416 | O | HOH | 1152 | -9.792 | 49.349 | 65.369 | 1.00 | 21.86 | O |
| HETATM13417 | O | HOH | 1153 | 18.984 | 47.257 | 60.240 | 1.00 | 20.17 | O |
| HETATM13418 | O | HOH | 1154 | 27.886 | 64.830 | 69.551 | 1.00 | 17.15 | O |
| HETATM13419 | O | HOH | 1155 | 24.267 | 68.231 | 55.118 | 1.00 | 23.10 | O |
| HETATM13420 | O | HOH | 1156 | -16.573 | 58.448 | 81.108 | 1.00 | 22.78 | O |
| HETATM13421 | O | HOH | 1157 | 8.887 | 79.748 | 86.825 | 1.00 | 24.29 | O |
| HETATM13422 | O | HOH | 1158 | 21.059 | 76.255 | 47.345 | 1.00 | 23.17 | O |
| HETATM13423 | O | HOH | 1159 | 30.745 | 53.944 | 62.112 | 1.00 | 15.05 | O |
| HETATM13424 | O | HOH | 1160 | 14.590 | 47.386 | 50.532 | 1.00 | 14.91 | O |
| HETATM13425 | O | HOH | 1161 | 14.300 | 57.432 | 81.846 | 1.00 | 11.78 | O |
| HETATM13426 | O | HOH | 1162 | 26.731 | 43.788 | 65.542 | 1.00 | 20.43 | O |
| HETATM13427 | O | HOH | 1163 | -9.408 | 61.639 | 56.003 | 1.00 | 23.72 | O |
| HETATM13428 | O | HOH | 1164 | 19.220 | 60.983 | 39.626 | 1.00 | 25.01 | O |
| HETATM13429 | O | HOH | 1165 | -2.282 | 77.191 | 78.525 | 1.00 | 25.23 | O |
| HETATM13430 | O | HOH | 1166 | 20.039 | 58.342 | 47.296 | 1.00 | 15.93 | O |
| HETATM13431 | O | HOH | 1167 | -5.550 | 73.049 | 65.132 | 1.00 | 22.03 | O |
| HETATM13432 | O | HOH | 1168 | 6.242 | 35.566 | 43.184 | 1.00 | 23.80 | O |
| HETATM13433 | O | HOH | 1169 | -4.686 | 52.917 | 54.355 | 1.00 | 22.24 | O |

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|---|---|---|---|---|---|---|---|---|---|---|
| HETATM13434 | O | HOH | 1170 | 4.670 | 56.703 | 92.935 | 1.00 | 26.24 | | O |
| HETATM13435 | O | HOH | 1171 | -11.610 | 68.497 | 62.782 | 1.00 | 20.03 | | O |
| HETATM13436 | O | HOH | 1172 | -0.080 | 58.347 | 15.957 | 1.00 | 28.75 | | O |
| HETATM13437 | O | HOH | 1173 | 30.385 | 63.716 | 49.248 | 1.00 | 20.79 | | O |
| HETATM13438 | O | HOH | 1174 | 33.410 | 56.548 | 56.561 | 1.00 | 18.90 | | O |
| HETATM13439 | O | HOH | 1175 | 30.360 | 54.337 | 64.767 | 1.00 | 18.64 | | O |
| HETATM13440 | O | HOH | 1176 | 25.740 | 43.564 | 29.863 | 1.00 | 21.60 | | O |
| HETATM13441 | O | HOH | 1177 | 35.381 | 65.211 | 56.410 | 1.00 | 24.37 | | O |
| HETATM13442 | O | HOH | 1178 | -10.248 | 63.301 | 29.812 | 1.00 | 19.31 | | O |
| HETATM13443 | O | HOH | 1179 | 6.793 | 55.420 | 33.896 | 1.00 | 23.37 | | O |
| HETATM13444 | O | HOH | 1180 | 9.019 | 53.488 | 60.529 | 1.00 | 16.96 | | O |
| HETATM13445 | O | HOH | 1181 | 15.381 | 71.333 | 40.632 | 1.00 | 18.27 | | O |
| HETATM13446 | O | HOH | 1182 | 6.114 | 51.352 | 36.196 | 1.00 | 31.47 | | O |
| HETATM13447 | O | HOH | 1183 | 32.406 | 67.250 | 54.211 | 1.00 | 23.06 | | O |
| HETATM13448 | O | HOH | 1184 | 6.088 | 41.291 | 62.191 | 1.00 | 21.59 | | O |
| HETATM13449 | O | HOH | 1185 | 6.792 | 71.503 | 70.998 | 1.00 | 18.22 | | O |
| HETATM13450 | O | HOH | 1186 | -2.972 | 67.081 | 59.292 | 1.00 | 19.96 | | O |
| HETATM13451 | O | HOH | 1187 | -7.190 | 51.267 | 51.268 | 1.00 | 21.11 | | O |
| HETATM13452 | O | HOH | 1188 | 20.984 | 45.016 | 49.963 | 1.00 | 24.40 | | O |
| HETATM13453 | O | HOH | 1189 | 24.497 | 56.716 | 85.136 | 1.00 | 22.56 | | O |
| HETATM13454 | O | HOH | 1190 | 10.163 | 35.473 | 40.994 | 1.00 | 20.67 | | O |
| HETATM13455 | O | HOH | 1191 | -5.569 | 42.583 | 51.584 | 1.00 | 17.99 | | O |
| HETATM13456 | O | HOH | 1192 | 16.187 | 66.558 | 64.651 | 1.00 | 23.63 | | O |
| HETATM13457 | O | HOH | 1193 | 9.130 | 65.843 | 93.956 | 1.00 | 22.28 | | O |
| HETATM13458 | O | HOH | 1194 | 12.525 | 44.181 | 83.402 | 1.00 | 21.78 | | O |
| HETATM13459 | O | HOH | 1195 | -2.318 | 47.893 | 32.308 | 1.00 | 24.96 | | O |
| HETATM13460 | O | HOH | 1196 | 10.848 | 85.966 | 90.665 | 1.00 | 23.85 | | O |
| HETATM13461 | O | HOH | 1197 | 30.350 | 61.768 | 79.551 | 1.00 | 20.47 | | O |
| HETATM13462 | O | HOH | 1198 | 4.796 | 74.791 | 100.482 | 1.00 | 26.53 | | O |
| HETATM13463 | O | HOH | 1199 | 11.361 | 83.950 | 70.129 | 1.00 | 19.43 | | O |
| HETATM13464 | O | HOH | 1200 | -5.580 | 49.594 | 33.702 | 1.00 | 21.41 | | O |
| HETATM13465 | O | HOH | 1201 | 8.201 | 37.613 | 29.530 | 1.00 | 34.81 | | O |
| HETATM13466 | O | HOH | 1202 | 26.445 | 69.656 | 73.962 | 1.00 | 20.60 | | O |
| HETATM13467 | O | HOH | 1203 | 11.241 | 58.673 | 20.318 | 1.00 | 23.61 | | O |
| HETATM13468 | O | HOH | 1204 | -6.381 | 60.566 | 60.002 | 1.00 | 28.55 | | O |
| HETATM13469 | O | HOH | 1205 | -13.183 | 62.538 | 62.145 | 1.00 | 22.94 | | O |
| HETATM13470 | O | HOH | 1206 | 13.842 | 34.172 | 51.116 | 1.00 | 24.49 | | O |
| HETATM13471 | O | HOH | 1207 | 23.488 | 65.880 | 36.145 | 1.00 | 25.39 | | O |
| HETATM13472 | O | HOH | 1208 | 15.868 | 76.084 | 84.927 | 1.00 | 32.82 | | O |
| HETATM13473 | O | HOH | 1209 | -8.606 | 43.939 | 69.397 | 1.00 | 26.89 | | O |
| HETATM13474 | O | HOH | 1210 | -11.980 | 65.470 | 79.824 | 1.00 | 23.77 | | O |
| HETATM13475 | O | HOH | 1211 | -1.755 | 78.632 | 56.718 | 1.00 | 22.28 | | O |
| HETATM13476 | O | HOH | 1212 | 24.867 | 74.536 | 38.734 | 1.00 | 23.26 | | O |
| HETATM13477 | O | HOH | 1213 | 31.933 | 45.688 | 26.281 | 1.00 | 34.69 | | O |
| HETATM13478 | O | HOH | 1214 | 28.442 | 72.231 | 62.483 | 1.00 | 18.76 | | O |
| HETATM13479 | O | HOH | 1215 | 6.816 | 42.031 | 44.733 | 1.00 | 29.93 | | O |
| HETATM13480 | O | HOH | 1216 | 3.567 | 54.692 | 21.585 | 1.00 | 21.00 | | O |
| HETATM13481 | O | HOH | 1217 | -7.516 | 53.717 | 52.400 | 1.00 | 21.34 | | O |
| HETATM13482 | O | HOH | 1218 | -13.187 | 77.094 | 62.468 | 1.00 | 21.20 | | O |
| HETATM13483 | O | HOH | 1219 | 10.470 | 69.125 | 24.922 | 1.00 | 25.11 | | O |
| HETATM13484 | O | HOH | 1220 | 0.492 | 66.644 | 97.563 | 1.00 | 29.67 | | O |
| HETATM13485 | O | HOH | 1221 | -7.357 | 57.955 | 62.283 | 1.00 | 21.74 | | O |
| HETATM13486 | O | HOH | 1222 | 6.236 | 83.778 | 47.203 | 1.00 | 20.05 | | O |
| HETATM13487 | O | HOH | 1223 | 29.782 | 29.512 | 63.143 | 1.00 | 31.63 | | O |
| HETATM13488 | O | HOH | 1224 | 12.328 | 66.675 | 83.938 | 1.00 | 18.46 | | O |
| HETATM13489 | O | HOH | 1225 | -9.534 | 58.097 | 68.975 | 1.00 | 18.41 | | O |
| HETATM13490 | O | HOH | 1226 | -13.427 | 82.977 | 52.919 | 1.00 | 30.45 | | O |
| HETATM13491 | O | HOH | 1227 | 1.123 | 59.012 | 91.861 | 1.00 | 20.68 | | O |
| HETATM13492 | O | HOH | 1228 | 33.263 | 70.316 | 67.805 | 1.00 | 26.06 | | O |
| HETATM13493 | O | HOH | 1229 | 26.087 | 64.965 | 66.282 | 1.00 | 19.81 | | O |
| HETATM13494 | O | HOH | 1230 | 15.958 | 33.028 | 61.968 | 1.00 | 24.80 | | O |
| HETATM13495 | O | HOH | 1231 | 10.974 | 42.610 | 71.166 | 1.00 | 18.73 | | O |
| HETATM13496 | O | HOH | 1232 | 4.950 | 74.572 | 58.639 | 1.00 | 24.80 | | O |
| HETATM13497 | O | HOH | 1233 | 23.076 | 45.793 | 78.807 | 1.00 | 22.15 | | O |
| HETATM13498 | O | HOH | 1234 | 11.488 | 72.761 | 60.516 | 1.00 | 17.16 | | O |
| HETATM13499 | O | HOH | 1235 | -1.344 | 36.199 | 58.055 | 1.00 | 27.87 | | O |
| HETATM13500 | O | HOH | 1236 | 27.649 | 68.463 | 63.027 | 1.00 | 27.20 | | O |
| HETATM13501 | O | HOH | 1237 | 0.543 | 69.166 | 26.556 | 1.00 | 18.79 | | O |
| HETATM13502 | O | HOH | 1238 | 16.675 | 58.580 | 40.338 | 1.00 | 28.22 | | O |
| HETATM13503 | O | HOH | 1239 | -0.574 | 38.671 | 86.984 | 1.00 | 27.13 | | O |
| HETATM13504 | O | HOH | 1240 | -2.180 | 83.811 | 28.957 | 1.00 | 33.95 | | O |
| HETATM13505 | O | HOH | 1241 | 26.789 | 65.470 | 73.576 | 1.00 | 23.71 | | O |
| HETATM13506 | O | HOH | 1242 | 21.390 | 53.951 | 13.336 | 1.00 | 28.97 | | O |
| HETATM13507 | O | HOH | 1243 | -3.038 | 62.937 | 56.124 | 1.00 | 24.95 | | O |
| HETATM13508 | O | HOH | 1244 | 21.997 | 59.366 | 38.639 | 1.00 | 28.93 | | O |
| HETATM13509 | O | HOH | 1245 | 2.227 | 69.139 | 71.244 | 1.00 | 21.78 | | O |
| HETATM13510 | O | HOH | 1246 | 14.894 | 55.276 | 58.809 | 1.00 | 18.04 | | O |
| HETATM13511 | O | HOH | 1247 | -0.550 | 38.590 | 58.683 | 1.00 | 24.11 | | O |
| HETATM13512 | O | HOH | 1248 | -14.946 | 61.954 | 54.330 | 1.00 | 24.54 | | O |
| HETATM13513 | O | HOH | 1249 | -6.947 | 70.327 | 48.736 | 1.00 | 29.40 | | O |

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|---|---|---|---|---|---|---|---|---|---|---|
| HETATM13514 | O | HOH | 1250 | 32.529 | 82.783 | 68.663 | 1.00 | 29.54 | | O |
| HETATM13515 | O | HOH | 1251 | -4.649 | 54.565 | 34.620 | 1.00 | 21.35 | | O |
| HETATM13516 | O | HOH | 1252 | 34.514 | 81.981 | 81.237 | 1.00 | 26.31 | | O |
| HETATM13517 | O | HOH | 1253 | 26.189 | 79.737 | 60.979 | 1.00 | 22.12 | | O |
| HETATM13518 | O | HOH | 1254 | -0.050 | 45.031 | 73.692 | 1.00 | 20.23 | | O |
| HETATM13519 | O | HOH | 1255 | 27.486 | 80.310 | 83.711 | 1.00 | 20.53 | | O |
| HETATM13520 | O | HOH | 1256 | 2.214 | 59.700 | 15.529 | 1.00 | 25.69 | | O |
| HETATM13521 | O | HOH | 1257 | 12.994 | 82.002 | 34.212 | 1.00 | 33.83 | | O |
| HETATM13522 | O | HOH | 1258 | 3.726 | 82.420 | 63.842 | 1.00 | 24.65 | | O |
| HETATM13523 | O | HOH | 1259 | 1.691 | 50.535 | 95.844 | 1.00 | 29.76 | | O |
| HETATM13524 | O | HOH | 1260 | 15.211 | 63.852 | 93.050 | 1.00 | 23.74 | | O |
| HETATM13525 | O | HOH | 1261 | -3.266 | 44.388 | 34.648 | 1.00 | 27.44 | | O |
| HETATM13526 | O | HOH | 1262 | 26.985 | 67.451 | 69.586 | 1.00 | 19.89 | | O |
| HETATM13527 | O | HOH | 1263 | 3.736 | 35.660 | 45.541 | 1.00 | 27.29 | | O |
| HETATM13528 | O | HOH | 1264 | -3.044 | 72.597 | 80.653 | 1.00 | 37.05 | | O |
| HETATM13529 | O | HOH | 1265 | 10.948 | 54.887 | 20.427 | 1.00 | 24.82 | | O |
| HETATM13530 | O | HOH | 1266 | 40.388 | 47.304 | 46.099 | 1.00 | 26.31 | | O |
| HETATM13531 | O | HOH | 1267 | 1.791 | 66.712 | 62.764 | 1.00 | 23.32 | | O |
| HETATM13532 | O | HOH | 1268 | -12.116 | 70.701 | 60.906 | 1.00 | 26.31 | | O |
| HETATM13533 | O | HOH | 1269 | 17.143 | 67.108 | 92.692 | 1.00 | 22.51 | | O |
| HETATM13534 | O | HOH | 1270 | -12.238 | 45.889 | 34.992 | 1.00 | 28.08 | | O |
| HETATM13535 | O | HOH | 1271 | 17.708 | 36.618 | 71.025 | 1.00 | 23.04 | | O |
| HETATM13536 | O | HOH | 1272 | 29.387 | 66.029 | 53.359 | 1.00 | 26.09 | | O |
| HETATM13537 | O | HOH | 1273 | 25.993 | 51.281 | 19.366 | 1.00 | 33.30 | | O |
| HETATM13538 | O | HOH | 1274 | -17.084 | 59.899 | 86.276 | 1.00 | 34.67 | | O |
| HETATM13539 | O | HOH | 1275 | -18.112 | 55.105 | 53.695 | 1.00 | 32.56 | | O |
| HETATM13540 | O | HOH | 1276 | 16.242 | 76.818 | 82.553 | 1.00 | 31.40 | | O |
| HETATM13541 | O | HOH | 1277 | 29.098 | 66.906 | 46.861 | 1.00 | 22.87 | | O |
| HETATM13542 | O | HOH | 1278 | 11.171 | 40.127 | 89.527 | 1.00 | 27.85 | | O |
| HETATM13543 | O | HOH | 1279 | -15.100 | 55.305 | 83.464 | 1.00 | 24.82 | | O |
| HETATM13544 | O | HOH | 1280 | 31.289 | 79.908 | 58.398 | 1.00 | 29.59 | | O |
| HETATM13545 | O | HOH | 1281 | 29.457 | 90.823 | 76.543 | 1.00 | 28.47 | | O |
| HETATM13546 | O | HOH | 1282 | 31.099 | 77.841 | 73.975 | 1.00 | 24.79 | | O |
| HETATM13547 | O | HOH | 1283 | 24.634 | 35.682 | 34.721 | 1.00 | 28.68 | | O |
| HETATM13548 | O | HOH | 1284 | -7.970 | 67.821 | 60.212 | 1.00 | 27.75 | | O |
| HETATM13549 | O | HOH | 1285 | 34.505 | 54.784 | 65.787 | 1.00 | 28.08 | | O |
| HETATM13550 | O | HOH | 1286 | 0.973 | 36.843 | 46.465 | 1.00 | 23.32 | | O |
| HETATM13551 | O | HOH | 1287 | 3.447 | 74.288 | 22.424 | 1.00 | 25.05 | | O |
| HETATM13552 | O | HOH | 1288 | -6.691 | 51.322 | 54.660 | 1.00 | 22.43 | | O |
| HETATM13553 | O | HOH | 1289 | 6.577 | 72.093 | 28.220 | 1.00 | 28.09 | | O |
| HETATM13554 | O | HOH | 1290 | 9.313 | 88.208 | 68.954 | 1.00 | 39.00 | | O |
| HETATM13555 | O | HOH | 1291 | -12.448 | 51.186 | 44.877 | 1.00 | 24.62 | | O |
| HETATM13556 | O | HOH | 1292 | 30.756 | 64.202 | 73.421 | 1.00 | 33.90 | | O |
| HETATM13557 | O | HOH | 1293 | 14.932 | 73.048 | 84.460 | 1.00 | 25.30 | | O |
| HETATM13558 | O | HOH | 1294 | 26.546 | 79.281 | 58.314 | 1.00 | 25.49 | | O |
| HETATM13559 | O | HOH | 1295 | 12.853 | 50.410 | 43.621 | 1.00 | 30.79 | | O |
| HETATM13560 | O | HOH | 1296 | 10.934 | 38.315 | 75.694 | 1.00 | 24.47 | | O |
| HETATM13561 | O | HOH | 1297 | 16.183 | 42.608 | 70.069 | 1.00 | 21.39 | | O |
| HETATM13562 | O | HOH | 1298 | -6.707 | 78.187 | 77.934 | 1.00 | 30.50 | | O |
| HETATM13563 | O | HOH | 1299 | 10.927 | 85.707 | 65.194 | 1.00 | 26.73 | | O |
| HETATM13564 | O | HOH | 1300 | -3.315 | 87.322 | 52.407 | 1.00 | 29.01 | | O |
| HETATM13565 | O | HOH | 1301 | -9.037 | 68.613 | 63.918 | 1.00 | 22.25 | | O |
| HETATM13566 | O | HOH | 1302 | 35.368 | 52.325 | 44.268 | 1.00 | 30.48 | | O |
| HETATM13567 | O | HOH | 1303 | 17.904 | 62.197 | 25.441 | 1.00 | 20.14 | | O |
| HETATM13568 | O | HOH | 1304 | 5.801 | 73.821 | 21.322 | 1.00 | 23.76 | | O |
| HETATM13569 | O | HOH | 1305 | 14.788 | 80.966 | 80.293 | 1.00 | 28.01 | | O |
| HETATM13570 | O | HOH | 1306 | -6.559 | 41.728 | 68.632 | 1.00 | 28.89 | | O |
| HETATM13571 | O | HOH | 1307 | -4.847 | 80.967 | 76.846 | 1.00 | 31.31 | | O |
| HETATM13572 | O | HOH | 1308 | 18.125 | 62.942 | 55.568 | 1.00 | 19.47 | | O |
| HETATM13573 | O | HOH | 1309 | 13.150 | 51.550 | 88.260 | 1.00 | 28.48 | | O |
| HETATM13574 | O | HOH | 1310 | 16.348 | 74.374 | 31.112 | 1.00 | 36.83 | | O |
| HETATM13575 | O | HOH | 1311 | -0.978 | 70.638 | 96.953 | 1.00 | 30.08 | | O |
| HETATM13576 | O | HOH | 1312 | -9.136 | 41.641 | 94.180 | 1.00 | 32.92 | | O |
| HETATM13577 | O | HOH | 1313 | 16.849 | 71.600 | 38.121 | 1.00 | 21.08 | | O |
| HETATM13578 | O | HOH | 1314 | -7.817 | 78.587 | 39.042 | 1.00 | 29.60 | | O |
| HETATM13579 | O | HOH | 1315 | 12.780 | 54.129 | 88.566 | 1.00 | 23.33 | | O |
| HETATM13580 | O | HOH | 1316 | -7.793 | 66.487 | 62.804 | 1.00 | 25.67 | | O |
| HETATM13581 | O | HOH | 1317 | 21.063 | 48.968 | 32.698 | 1.00 | 23.52 | | O |
| HETATM13582 | O | HOH | 1318 | 40.158 | 31.171 | 60.886 | 1.00 | 33.87 | | O |
| HETATM13583 | O | HOH | 1319 | -14.666 | 69.837 | 80.066 | 1.00 | 26.07 | | O |
| HETATM13584 | O | HOH | 1320 | 14.645 | 53.764 | 37.654 | 1.00 | 25.73 | | O |
| HETATM13585 | O | HOH | 1321 | -5.275 | 41.779 | 43.710 | 1.00 | 29.64 | | O |
| HETATM13586 | O | HOH | 1322 | 24.902 | 68.290 | 60.485 | 1.00 | 25.59 | | O |
| HETATM13587 | O | HOH | 1323 | -7.478 | 68.098 | 93.994 | 1.00 | 24.89 | | O |
| HETATM13588 | O | HOH | 1324 | 5.928 | 82.057 | 54.919 | 1.00 | 24.14 | | O |
| HETATM13589 | O | HOH | 1325 | 15.061 | 60.753 | 31.764 | 1.00 | 24.99 | | O |
| HETATM13590 | O | HOH | 1326 | -23.303 | 64.078 | 77.983 | 1.00 | 33.83 | | O |
| HETATM13591 | O | HOH | 1327 | 28.311 | 29.580 | 50.153 | 1.00 | 33.36 | | O |
| HETATM13592 | O | HOH | 1328 | -3.367 | 51.918 | 24.679 | 1.00 | 28.34 | | O |
| HETATM13593 | O | HOH | 1329 | 30.293 | 66.902 | 72.355 | 1.00 | 21.25 | | O |

| HETATM13594 | O | HOH | 1330 | -3.441 | 75.327 | 81.057 | 1.00 | 27.29 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13595 | O | HOH | 1331 | 26.759 | 17.650 | 63.966 | 1.00 | 29.55 | O |
| HETATM13596 | O | HOH | 1332 | 29.412 | 78.156 | 58.902 | 1.00 | 21.34 | O |
| HETATM13597 | O | HOH | 1333 | 32.793 | 72.752 | 44.017 | 1.00 | 22.39 | O |
| HETATM13598 | O | HOH | 1334 | -11.628 | 39.755 | 46.291 | 1.00 | 23.72 | O |
| HETATM13599 | O | HOH | 1335 | 5.576 | 41.877 | 31.295 | 1.00 | 38.89 | O |
| HETATM13600 | O | HOH | 1336 | 9.271 | 82.559 | 68.031 | 1.00 | 26.38 | O |
| HETATM13601 | O | HOH | 1337 | 15.221 | 71.190 | 50.176 | 1.00 | 20.71 | O |
| HETATM13602 | O | HOH | 1338 | 3.968 | 45.128 | 38.110 | 1.00 | 24.09 | O |
| HETATM13603 | O | HOH | 1339 | 17.517 | 33.609 | 77.963 | 1.00 | 25.17 | O |
| HETATM13604 | O | HOH | 1340 | 37.443 | 57.732 | 50.403 | 1.00 | 27.02 | O |
| HETATM13605 | O | HOH | 1341 | 4.993 | 93.983 | 56.579 | 1.00 | 32.38 | O |
| HETATM13606 | O | HOH | 1342 | 7.932 | 35.550 | 79.482 | 1.00 | 26.51 | O |
| HETATM13607 | O | HOH | 1343 | 9.009 | 77.658 | 84.688 | 1.00 | 34.23 | O |
| HETATM13608 | O | HOH | 1344 | 20.132 | 85.360 | 42.583 | 1.00 | 25.90 | O |
| HETATM13609 | O | HOH | 1345 | -1.963 | 50.991 | 21.978 | 1.00 | 30.36 | O |
| HETATM13610 | O | HOH | 1346 | -6.150 | 52.535 | 67.739 | 1.00 | 17.20 | O |
| HETATM13611 | O | HOH | 1347 | -3.891 | 80.619 | 80.794 | 1.00 | 28.34 | O |
| HETATM13612 | O | HOH | 1348 | -17.891 | 66.509 | 68.072 | 1.00 | 30.00 | O |
| HETATM13613 | O | HOH | 1349 | 24.960 | 49.401 | 40.552 | 1.00 | 26.26 | O |
| HETATM13614 | O | HOH | 1350 | 19.689 | 33.305 | 46.781 | 1.00 | 31.99 | O |
| HETATM13615 | O | HOH | 1351 | -10.901 | 56.320 | 51.201 | 1.00 | 23.71 | O |
| HETATM13616 | O | HOH | 1352 | 5.522 | 56.821 | 84.379 | 1.00 | 26.94 | O |
| HETATM13617 | O | HOH | 1353 | -15.922 | 62.837 | 60.536 | 1.00 | 29.22 | O |
| HETATM13618 | O | HOH | 1354 | 14.389 | 32.745 | 59.299 | 1.00 | 22.86 | O |
| HETATM13619 | O | HOH | 1355 | 31.842 | 40.566 | 34.819 | 1.00 | 24.26 | O |
| HETATM13620 | O | HOH | 1356 | 39.748 | 66.431 | 50.941 | 1.00 | 27.10 | O |
| HETATM13621 | O | HOH | 1357 | 3.893 | 68.058 | 55.976 | 1.00 | 26.08 | O |
| HETATM13622 | O | HOH | 1358 | 3.128 | 93.889 | 58.777 | 1.00 | 35.61 | O |
| HETATM13623 | O | HOH | 1359 | 4.328 | 58.647 | 59.057 | 1.00 | 28.03 | O |
| HETATM13624 | O | HOH | 1360 | 13.418 | 38.951 | 75.482 | 1.00 | 31.39 | O |
| HETATM13625 | O | HOH | 1361 | 26.832 | 67.477 | 56.234 | 1.00 | 30.83 | O |
| HETATM13626 | O | HOH | 1362 | -13.227 | 62.085 | 74.023 | 1.00 | 32.44 | O |
| HETATM13627 | O | HOH | 1363 | 15.346 | 77.245 | 31.323 | 1.00 | 27.85 | O |
| HETATM13628 | O | HOH | 1364 | 9.374 | 63.103 | 93.260 | 1.00 | 27.73 | O |
| HETATM13629 | O | HOH | 1365 | 13.203 | 35.808 | 23.582 | 1.00 | 42.40 | O |
| HETATM13630 | O | HOH | 1366 | 5.970 | 72.478 | 57.420 | 1.00 | 19.93 | O |
| HETATM13631 | O | HOH | 1367 | 22.604 | 35.549 | 43.930 | 1.00 | 23.18 | O |
| HETATM13632 | O | HOH | 1368 | 23.125 | 63.646 | 34.890 | 1.00 | 25.72 | O |
| HETATM13633 | O | HOH | 1369 | -1.110 | 76.860 | 75.733 | 1.00 | 31.90 | O |
| HETATM13634 | O | HOH | 1370 | -3.530 | 81.874 | 71.600 | 1.00 | 29.54 | O |
| HETATM13635 | O | HOH | 1371 | 9.614 | 36.007 | 77.067 | 1.00 | 33.07 | O |
| HETATM13636 | O | HOH | 1372 | -15.097 | 55.482 | 72.339 | 1.00 | 27.49 | O |
| HETATM13637 | O | HOH | 1373 | -0.343 | 51.932 | 88.545 | 1.00 | 34.68 | O |
| HETATM13638 | O | HOH | 1374 | -0.580 | 82.921 | 54.695 | 1.00 | 29.04 | O |
| HETATM13639 | O | HOH | 1375 | -6.910 | 62.661 | 52.316 | 1.00 | 22.31 | O |
| HETATM13640 | O | HOH | 1376 | 29.479 | 79.667 | 73.843 | 1.00 | 28.20 | O |
| HETATM13641 | O | HOH | 1377 | -5.922 | 36.949 | 61.017 | 1.00 | 24.92 | O |
| HETATM13642 | O | HOH | 1378 | -13.091 | 54.992 | 51.897 | 1.00 | 30.29 | O |
| HETATM13643 | O | HOH | 1379 | 31.090 | 87.780 | 75.848 | 1.00 | 32.03 | O |
| HETATM13644 | O | HOH | 1380 | 13.800 | 35.353 | 37.560 | 1.00 | 32.90 | O |
| HETATM13645 | O | HOH | 1381 | 26.363 | 104.323 | 57.064 | 1.00 | 54.20 | O |
| HETATM13646 | O | HOH | 1382 | 4.290 | 80.488 | 91.821 | 1.00 | 29.47 | O |
| HETATM13647 | O | HOH | 1383 | 25.206 | 36.247 | 44.199 | 1.00 | 25.53 | O |
| HETATM13648 | O | HOH | 1384 | -1.671 | 52.163 | 55.674 | 1.00 | 34.19 | O |
| HETATM13649 | O | HOH | 1385 | 0.712 | 37.357 | 43.105 | 1.00 | 28.73 | O |
| HETATM13650 | O | HOH | 1386 | 18.853 | 34.258 | 71.803 | 1.00 | 34.25 | O |
| HETATM13651 | O | HOH | 1387 | 25.030 | 38.079 | 31.615 | 1.00 | 20.16 | O |
| HETATM13652 | O | HOH | 1388 | -4.984 | 84.951 | 53.231 | 1.00 | 32.77 | O |
| HETATM13653 | O | HOH | 1389 | 7.363 | 93.095 | 82.917 | 1.00 | 22.89 | O |
| HETATM13654 | O | HOH | 1390 | 17.713 | 64.851 | 84.833 | 1.00 | 33.32 | O |
| HETATM13655 | O | HOH | 1391 | 13.905 | 95.661 | 69.275 | 1.00 | 41.10 | O |
| HETATM13656 | O | HOH | 1392 | -11.733 | 69.916 | 48.478 | 1.00 | 24.99 | O |
| HETATM13657 | O | HOH | 1393 | -2.237 | 77.839 | 42.067 | 1.00 | 27.12 | O |
| HETATM13658 | O | HOH | 1394 | -2.033 | 36.395 | 46.648 | 1.00 | 39.36 | O |
| HETATM13659 | O | HOH | 1395 | 19.180 | 62.785 | 91.544 | 1.00 | 29.95 | O |
| HETATM13660 | O | HOH | 1396 | 8.448 | 43.574 | 35.715 | 1.00 | 26.35 | O |
| HETATM13661 | O | HOH | 1397 | 14.770 | 68.443 | 96.272 | 1.00 | 30.10 | O |
| HETATM13662 | O | HOH | 1398 | 25.602 | 63.834 | 28.425 | 1.00 | 23.40 | O |
| HETATM13663 | O | HOH | 1399 | 7.084 | 73.352 | 78.094 | 1.00 | 38.51 | O |
| HETATM13664 | O | HOH | 1400 | 16.368 | 51.613 | 38.239 | 1.00 | 27.40 | O |
| HETATM13665 | O | HOH | 1401 | 4.198 | 33.976 | 89.349 | 1.00 | 33.75 | O |
| HETATM13666 | O | HOH | 1402 | 10.250 | 69.242 | 79.120 | 1.00 | 24.85 | O |
| HETATM13667 | O | HOH | 1403 | 41.453 | 60.093 | 57.609 | 1.00 | 34.96 | O |
| HETATM13668 | O | HOH | 1404 | -8.918 | 85.316 | 63.701 | 1.00 | 32.50 | O |
| HETATM13669 | O | HOH | 1405 | 18.002 | 67.694 | 57.425 | 1.00 | 32.47 | O |
| HETATM13670 | O | HOH | 1406 | -0.886 | 47.833 | 25.692 | 1.00 | 23.23 | O |
| HETATM13671 | O | HOH | 1407 | 13.891 | 32.912 | 53.583 | 1.00 | 29.68 | O |
| HETATM13672 | O | HOH | 1408 | 1.285 | 80.788 | 74.499 | 1.00 | 23.98 | O |
| HETATM13673 | O | HOH | 1409 | 20.009 | 42.996 | 54.546 | 1.00 | 27.61 | O |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HETATM13674 | O | HOH | 1410 | 6.567 | 34.073 | 78.045 | 1.00 | 31.39 | | O |
| HETATM13675 | O | HOH | 1411 | 22.880 | 51.699 | 38.608 | 1.00 | 32.18 | | O |
| HETATM13676 | O | HOH | 1412 | 10.271 | 31.949 | 77.670 | 1.00 | 39.42 | | O |
| HETATM13677 | O | HOH | 1413 | 24.491 | 50.498 | 31.805 | 1.00 | 41.57 | | O |
| HETATM13678 | O | HOH | 1414 | 12.546 | 51.894 | 74.403 | 1.00 | 17.96 | | O |
| HETATM13679 | O | HOH | 1415 | 34.883 | 48.316 | 68.011 | 1.00 | 27.09 | | O |
| HETATM13680 | O | HOH | 1416 | 32.933 | 51.419 | 78.946 | 1.00 | 34.86 | | O |
| HETATM13681 | O | HOH | 1417 | -2.396 | 67.189 | 14.073 | 1.00 | 36.02 | | O |
| HETATM13682 | O | HOH | 1418 | 34.533 | 40.022 | 34.329 | 1.00 | 35.07 | | O |
| HETATM13683 | O | HOH | 1419 | 2.737 | 37.962 | 62.742 | 1.00 | 27.11 | | O |
| HETATM13684 | O | HOH | 1420 | 30.250 | 64.229 | 70.448 | 1.00 | 23.52 | | O |
| HETATM13685 | O | HOH | 1421 | 4.163 | 61.634 | 53.124 | 1.00 | 23.94 | | O |
| HETATM13686 | O | HOH | 1422 | -0.149 | 62.231 | 54.792 | 1.00 | 37.67 | | O |
| HETATM13687 | O | HOH | 1423 | 25.631 | 81.770 | 79.499 | 1.00 | 28.92 | | O |
| HETATM13688 | O | HOH | 1424 | 22.213 | 83.152 | 43.967 | 1.00 | 33.15 | | O |
| HETATM13689 | O | HOH | 1425 | -3.237 | 37.368 | 86.936 | 1.00 | 30.22 | | O |
| HETATM13690 | O | HOH | 1426 | 32.673 | 41.661 | 66.481 | 1.00 | 30.87 | | O |
| HETATM13691 | O | HOH | 1427 | 1.964 | 38.029 | 59.446 | 1.00 | 29.18 | | O |
| HETATM13692 | O | HOH | 1428 | 8.463 | 52.400 | 36.495 | 1.00 | 31.87 | | O |
| HETATM13693 | O | HOH | 1429 | -12.980 | 72.613 | 82.205 | 1.00 | 29.82 | | O |
| HETATM13694 | O | HOH | 1430 | -1.751 | 52.496 | 90.942 | 1.00 | 33.45 | | O |
| HETATM13695 | O | HOH | 1431 | 44.524 | 46.590 | 50.545 | 1.00 | 26.16 | | O |
| HETATM13696 | O | HOH | 1432 | -15.652 | 43.325 | 50.447 | 1.00 | 33.12 | | O |
| HETATM13697 | O | HOH | 1433 | 30.489 | 49.530 | 22.986 | 1.00 | 44.48 | | O |
| HETATM13698 | O | HOH | 1434 | 33.886 | 33.089 | 35.656 | 1.00 | 30.51 | | O |
| HETATM13699 | O | HOH | 1435 | 32.643 | 29.491 | 63.843 | 1.00 | 36.77 | | O |
| HETATM13700 | O | HOH | 1436 | -0.214 | 60.929 | 61.134 | 1.00 | 26.77 | | O |
| HETATM13701 | O | HOH | 1437 | 5.330 | 56.548 | 61.097 | 1.00 | 31.03 | | O |
| HETATM13702 | O | HOH | 1438 | -10.252 | 73.566 | 57.691 | 1.00 | 40.18 | | O |
| HETATM13703 | O | HOH | 1439 | 27.763 | 51.957 | 81.712 | 1.00 | 25.69 | | O |
| HETATM13704 | O | HOH | 1440 | 17.412 | 92.965 | 96.910 | 1.00 | 45.69 | | O |
| HETATM13705 | O | HOH | 1441 | 37.312 | 68.732 | 73.121 | 1.00 | 38.35 | | O |
| HETATM13706 | O | HOH | 1442 | 20.506 | 53.838 | 88.835 | 1.00 | 32.28 | | O |
| HETATM13707 | O | HOH | 1443 | 21.906 | 33.403 | 45.566 | 1.00 | 26.70 | | O |
| HETATM13708 | O | HOH | 1444 | 11.199 | 93.300 | 76.372 | 1.00 | 37.51 | | O |
| HETATM13709 | O | HOH | 1445 | 2.074 | 45.819 | 31.261 | 1.00 | 30.30 | | O |
| HETATM13710 | O | HOH | 1446 | 14.679 | 80.684 | 90.274 | 1.00 | 26.22 | | O |
| HETATM13711 | O | HOH | 1447 | -5.928 | 78.691 | 80.796 | 1.00 | 38.03 | | O |
| HETATM13712 | O | HOH | 1448 | -11.637 | 48.437 | 31.698 | 1.00 | 28.97 | | O |
| HETATM13713 | O | HOH | 1449 | 19.945 | 77.663 | 45.031 | 1.00 | 25.01 | | O |
| HETATM13714 | O | HOH | 1450 | -3.789 | 53.382 | 89.373 | 1.00 | 22.41 | | O |
| HETATM13715 | O | HOH | 1451 | 12.626 | 51.019 | 34.740 | 1.00 | 35.16 | | O |
| HETATM13716 | O | HOH | 1452 | -14.030 | 47.227 | 59.308 | 1.00 | 36.92 | | O |
| HETATM13717 | O | HOH | 1453 | 13.734 | 76.963 | 81.463 | 1.00 | 42.20 | | O |
| HETATM13718 | O | HOH | 1454 | 8.051 | 65.659 | 36.774 | 1.00 | 24.98 | | O |
| HETATM13719 | O | HOH | 1455 | 13.310 | 101.179 | 70.796 | 1.00 | 32.71 | | O |
| HETATM13720 | O | HOH | 1456 | -10.422 | 68.469 | 59.613 | 1.00 | 27.00 | | O |
| HETATM13721 | O | HOH | 1457 | 16.596 | 91.321 | 87.237 | 1.00 | 23.35 | | O |
| HETATM13722 | O | HOH | 1458 | 14.576 | 70.930 | 52.779 | 1.00 | 33.01 | | O |
| HETATM13723 | O | HOH | 1459 | 34.714 | 76.085 | 75.893 | 1.00 | 32.22 | | O |
| HETATM13724 | O | HOH | 1460 | -20.761 | 41.079 | 53.884 | 1.00 | 38.68 | | O |
| HETATM13725 | O | HOH | 1461 | 12.046 | 30.842 | 74.494 | 1.00 | 34.54 | | O |
| HETATM13726 | O | HOH | 1462 | -9.965 | 81.005 | 45.314 | 1.00 | 33.60 | | O |
| HETATM13727 | O | HOH | 1463 | -9.965 | 58.098 | 26.965 | 1.00 | 26.13 | | O |
| HETATM13728 | O | HOH | 1464 | -14.172 | 52.218 | 29.673 | 1.00 | 46.74 | | O |
| HETATM13729 | O | HOH | 1465 | 5.724 | 54.833 | 79.616 | 1.00 | 24.13 | | O |
| HETATM13730 | O | HOH | 1466 | -8.534 | 80.491 | 85.090 | 1.00 | 38.26 | | O |
| HETATM13731 | O | HOH | 1467 | 10.629 | 94.579 | 69.684 | 1.00 | 31.37 | | O |
| HETATM13732 | O | HOH | 1468 | 12.084 | 105.880 | 54.526 | 1.00 | 35.09 | | O |
| HETATM13733 | O | HOH | 1469 | -13.291 | 48.982 | 94.450 | 1.00 | 32.55 | | O |
| HETATM13734 | O | HOH | 1470 | -8.070 | 62.334 | 99.904 | 1.00 | 26.37 | | O |
| HETATM13735 | O | HOH | 1471 | 17.355 | 50.177 | 32.287 | 1.00 | 39.20 | | O |
| HETATM13736 | O | HOH | 1472 | -13.975 | 59.100 | 32.236 | 1.00 | 32.62 | | O |
| HETATM13737 | O | HOH | 1473 | 10.002 | 68.011 | 35.849 | 1.00 | 35.15 | | O |
| HETATM13738 | O | HOH | 1474 | -0.089 | 36.404 | 37.611 | 1.00 | 41.78 | | O |
| HETATM13739 | O | HOH | 1475 | 21.897 | 64.941 | 65.005 | 1.00 | 22.34 | | O |
| HETATM13740 | O | HOH | 1476 | 7.007 | 56.985 | 50.495 | 1.00 | 13.59 | | O |
| HETATM13741 | O | HOH | 1477 | 0.936 | 56.105 | 52.749 | 1.00 | 14.34 | | O |
| HETATM13742 | O | HOH | 1478 | 19.004 | 61.438 | 50.727 | 1.00 | 11.23 | | O |
| HETATM13743 | O | HOH | 1479 | 17.857 | 66.947 | 69.159 | 1.00 | 14.78 | | O |
| HETATM13744 | O | HOH | 1480 | 1.885 | 58.271 | 53.832 | 1.00 | 13.77 | | O |
| HETATM13745 | O | HOH | 1481 | 21.829 | 66.832 | 68.554 | 1.00 | 14.27 | | O |
| HETATM13746 | O | HOH | 1482 | -0.451 | 65.166 | 62.469 | 1.00 | 14.40 | | O |
| HETATM13747 | O | HOH | 1483 | 4.822 | 56.246 | 51.848 | 1.00 | 14.44 | | O |
| HETATM13748 | O | HOH | 1484 | 22.559 | 64.074 | 55.145 | 1.00 | 19.48 | | O |
| HETATM13749 | O | HOH | 1485 | 24.327 | 81.765 | 88.471 | 1.00 | 20.43 | | O |
| HETATM13750 | O | HOH | 1486 | 27.649 | 67.639 | 72.283 | 1.00 | 19.71 | | O |
| HETATM13751 | O | HOH | 1487 | 24.577 | 66.688 | 68.397 | 1.00 | 18.64 | | O |
| HETATM13752 | O | HOH | 1488 | 1.082 | 68.165 | 65.139 | 1.00 | 16.93 | | O |
| HETATM13753 | O | HOH | 1489 | -2.320 | 67.047 | 63.246 | 1.00 | 17.73 | | O |

| HETATM13754 | O | HOH | 1490 | 22.584 | 66.521 | 56.492 | 1.00 | 19.61 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13755 | O | HOH | 1491 | -1.820 | 55.444 | 53.162 | 1.00 | 15.83 | O |
| HETATM13756 | O | HOH | 1492 | -0.978 | 65.735 | 59.778 | 1.00 | 18.76 | O |
| HETATM13757 | O | HOH | 1493 | 26.784 | 66.685 | 58.765 | 1.00 | 20.81 | O |
| HETATM13758 | O | HOH | 1494 | 3.175 | 68.162 | 66.825 | 1.00 | 19.66 | O |
| HETATM13759 | O | HOH | 1495 | -4.702 | 52.289 | 50.462 | 1.00 | 16.61 | O |
| HETATM13760 | O | HOH | 1496 | 24.025 | 64.566 | 53.111 | 1.00 | 21.75 | O |
| HETATM13761 | O | HOH | 1497 | -4.871 | 66.509 | 62.262 | 1.00 | 18.27 | O |
| HETATM13762 | O | HOH | 1498 | 26.479 | 65.858 | 53.884 | 1.00 | 20.77 | O |
| HETATM13763 | O | HOH | 1499 | 6.685 | 59.143 | 79.137 | 1.00 | 19.92 | O |
| HETATM13764 | O | HOH | 1500 | 26.131 | 66.005 | 63.680 | 1.00 | 30.21 | O |
| HETATM13765 | O | HOH | 1501 | -15.320 | 62.276 | 40.682 | 1.00 | 24.99 | O |
| HETATM13766 | O | HOH | 1502 | 15.099 | 54.037 | 40.375 | 1.00 | 19.88 | O |
| HETATM13767 | O | HOH | 1503 | -4.624 | 62.959 | 58.771 | 1.00 | 28.33 | O |
| HETATM13768 | O | HOH | 1504 | -8.426 | 59.228 | 28.792 | 1.00 | 12.06 | O |
| HETATM13769 | O | HOH | 1505 | 8.069 | 93.331 | 85.433 | 1.00 | 32.21 | O |
| HETATM13770 | O | HOH | 1506 | 6.979 | 48.489 | 35.411 | 1.00 | 23.59 | O |
| HETATM13771 | O | HOH | 1507 | -1.066 | 59.858 | 56.900 | 1.00 | 31.93 | O |
| HETATM13772 | O | HOH | 1508 | 11.652 | 57.000 | 12.759 | 1.00 | 27.75 | O |
| HETATM13773 | O | HOH | 1509 | 11.590 | 75.936 | 44.588 | 1.00 | 22.31 | O |
| HETATM13774 | O | HOH | 1510 | -15.941 | 60.764 | 82.898 | 1.00 | 27.04 | O |
| HETATM13775 | O | HOH | 1511 | 7.943 | 37.041 | 38.506 | 1.00 | 19.54 | O |
| HETATM13776 | O | HOH | 1512 | 9.868 | 77.690 | 80.704 | 1.00 | 35.00 | O |
| HETATM13777 | O | HOH | 1513 | 15.935 | 63.076 | 9.958 | 1.00 | 33.76 | O |
| HETATM13778 | O | HOH | 1514 | -20.881 | 65.171 | 77.617 | 1.00 | 28.66 | O |
| HETATM13779 | O | HOH | 1515 | 18.597 | 62.116 | 63.190 | 1.00 | 26.71 | O |
| HETATM13780 | O | HOH | 1516 | 37.100 | 77.550 | 67.750 | 1.00 | 32.69 | O |
| HETATM13781 | O | HOH | 1517 | 18.454 | 80.218 | 45.042 | 1.00 | 27.67 | O |
| HETATM13782 | O | HOH | 1518 | 15.047 | 70.515 | 82.172 | 1.00 | 29.61 | O |
| HETATM13783 | O | HOH | 1519 | 20.209 | 61.262 | 57.149 | 1.00 | 30.34 | O |
| HETATM13784 | O | HOH | 1520 | 21.905 | 61.286 | 89.619 | 1.00 | 25.41 | O |
| HETATM13785 | O | HOH | 1521 | -5.112 | 39.228 | 69.019 | 1.00 | 27.48 | O |
| HETATM13786 | O | HOH | 1522 | 18.656 | 83.914 | 93.330 | 1.00 | 39.43 | O |
| HETATM13787 | O | HOH | 1523 | -5.112 | 42.308 | 75.645 | 1.00 | 29.09 | O |
| HETATM13788 | O | HOH | 1524 | 16.012 | 36.465 | 38.219 | 1.00 | 30.46 | O |
| HETATM13789 | O | HOH | 1525 | 12.622 | 33.287 | 55.471 | 1.00 | 30.40 | O |
| HETATM13790 | O | HOH | 1526 | 43.933 | 55.414 | 44.720 | 1.00 | 30.17 | O |
| HETATM13791 | O | HOH | 1527 | -19.114 | 58.033 | 80.111 | 1.00 | 31.52 | O |
| HETATM13792 | O | HOH | 1528 | -16.225 | 64.394 | 58.460 | 1.00 | 28.41 | O |
| HETATM13793 | O | HOH | 1529 | 20.877 | 56.886 | 15.530 | 1.00 | 27.28 | O |
| HETATM13794 | O | HOH | 1530 | 10.441 | 91.599 | 86.540 | 1.00 | 32.96 | O |
| HETATM13795 | O | HOH | 1531 | 3.398 | 90.007 | 28.057 | 1.00 | 27.30 | O |
| HETATM13796 | O | HOH | 1532 | 11.285 | 48.562 | 36.649 | 1.00 | 30.54 | O |
| HETATM13797 | O | HOH | 1533 | -12.391 | 46.015 | 97.892 | 1.00 | 26.09 | O |
| HETATM13798 | O | HOH | 1534 | -10.180 | 85.525 | 78.684 | 1.00 | 46.10 | O |
| HETATM13799 | O | HOH | 1535 | 32.115 | 45.582 | 72.361 | 1.00 | 39.60 | O |
| HETATM13800 | O | HOH | 1536 | -6.877 | 60.701 | 56.948 | 1.00 | 35.97 | O |
| HETATM13801 | O | HOH | 1537 | 51.514 | 65.634 | 45.882 | 1.00 | 29.57 | O |
| HETATM13802 | O | HOH | 1538 | 24.662 | 91.875 | 56.746 | 1.00 | 30.51 | O |
| HETATM13803 | O | HOH | 1539 | 22.562 | 79.542 | 43.491 | 1.00 | 40.65 | O |
| HETATM13804 | O | HOH | 1540 | 18.621 | 31.096 | 45.626 | 1.00 | 26.54 | O |
| HETATM13805 | O | HOH | 1541 | 38.414 | 63.085 | 78.601 | 1.00 | 37.89 | O |
| HETATM13806 | O | HOH | 1542 | 31.614 | 35.748 | 67.478 | 1.00 | 38.94 | O |
| HETATM13807 | O | HOH | 1543 | 10.583 | 65.340 | 62.425 | 1.00 | 27.72 | O |
| HETATM13808 | O | HOH | 1544 | -13.702 | 73.001 | 85.131 | 1.00 | 23.40 | O |
| HETATM13809 | O | HOH | 1545 | -10.600 | 40.312 | 59.644 | 1.00 | 39.88 | O |
| HETATM13810 | O | HOH | 1546 | -8.734 | 87.053 | 70.141 | 1.00 | 35.41 | O |
| HETATM13811 | O | HOH | 1547 | 4.986 | 92.515 | 21.953 | 1.00 | 39.72 | O |
| HETATM13812 | O | HOH | 1548 | 2.298 | 89.763 | 38.471 | 1.00 | 33.57 | O |
| HETATM13813 | O | HOH | 1549 | 23.806 | 24.575 | 65.555 | 1.00 | 30.40 | O |
| HETATM13814 | O | HOH | 1550 | 4.845 | 65.292 | 60.095 | 1.00 | 37.84 | O |
| HETATM13815 | O | HOH | 1551 | 8.205 | 67.667 | 16.070 | 1.00 | 28.23 | O |
| HETATM13816 | O | HOH | 1552 | 13.385 | 73.882 | 87.467 | 1.00 | 32.50 | O |
| HETATM13817 | O | HOH | 1553 | -13.344 | 42.152 | 51.723 | 1.00 | 29.13 | O |
| HETATM13818 | O | HOH | 1554 | -15.895 | 57.944 | 43.089 | 1.00 | 32.04 | O |
| HETATM13819 | O | HOH | 1555 | 28.275 | 74.407 | 35.033 | 1.00 | 40.76 | O |
| HETATM13820 | O | HOH | 1556 | -19.162 | 58.366 | 68.975 | 1.00 | 28.74 | O |
| HETATM13821 | O | HOH | 1557 | 10.814 | 83.132 | 35.416 | 1.00 | 30.20 | O |
| HETATM13822 | O | HOH | 1558 | -16.912 | 62.189 | 56.250 | 1.00 | 34.33 | O |
| HETATM13823 | O | HOH | 1559 | -8.501 | 42.273 | 60.992 | 1.00 | 34.62 | O |
| HETATM13824 | O | HOH | 1560 | 1.104 | 46.906 | 20.233 | 1.00 | 48.30 | O |
| HETATM13825 | O | HOH | 1561 | 19.253 | 85.123 | 31.996 | 1.00 | 32.75 | O |
| HETATM13826 | O | HOH | 1562 | -0.348 | 49.368 | 94.086 | 1.00 | 26.11 | O |
| HETATM13827 | O | HOH | 1563 | -21.307 | 54.575 | 67.843 | 1.00 | 45.09 | O |
| HETATM13828 | O | HOH | 1564 | 7.696 | 56.350 | 61.452 | 1.00 | 33.85 | O |
| HETATM13829 | O | HOH | 1565 | 28.219 | 39.159 | 34.090 | 1.00 | 30.81 | O |
| HETATM13830 | O | HOH | 1566 | 22.664 | 84.995 | 89.765 | 1.00 | 29.29 | O |
| HETATM13831 | O | HOH | 1567 | 20.815 | 30.155 | 44.332 | 1.00 | 34.48 | O |
| HETATM13832 | O | HOH | 1568 | 3.871 | 31.999 | 96.209 | 1.00 | 34.70 | O |
| HETATM13833 | O | HOH | 1569 | 9.704 | 61.060 | 60.353 | 1.00 | 31.60 | O |

| HETATM13834 | O | HOH | 1570 | 7.585 | 34.262 | 86.789 | 1.00 | 25.20 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13835 | O | HOH | 1571 | -21.225 | 68.660 | 80.439 | 1.00 | 28.38 | O |
| HETATM13836 | O | HOH | 1572 | -14.925 | 77.562 | 44.905 | 1.00 | 37.33 | O |
| HETATM13837 | O | HOH | 1573 | -1.128 | 94.358 | 89.275 | 1.00 | 32.79 | O |
| HETATM13838 | O | HOH | 1574 | 20.553 | 43.237 | 21.598 | 1.00 | 38.02 | O |
| HETATM13839 | O | HOH | 1575 | 27.831 | 49.854 | 30.477 | 1.00 | 48.68 | O |
| HETATM13840 | O | HOH | 1576 | -16.321 | 59.875 | 45.993 | 1.00 | 30.98 | O |
| HETATM13841 | O | HOH | 1577 | 8.252 | 48.007 | 41.559 | 1.00 | 26.66 | O |
| HETATM13842 | O | HOH | 1578 | 1.665 | 90.101 | 92.027 | 1.00 | 34.60 | O |
| HETATM13843 | O | HOH | 1579 | 3.296 | 57.483 | 14.118 | 1.00 | 34.30 | O |
| HETATM13844 | O | HOH | 1580 | -8.021 | 37.788 | 80.553 | 1.00 | 39.07 | O |
| HETATM13845 | O | HOH | 1581 | 6.641 | 32.434 | 51.880 | 1.00 | 31.63 | O |
| HETATM13846 | O | HOH | 1582 | -5.166 | 67.751 | 95.967 | 1.00 | 44.02 | O |
| HETATM13847 | O | HOH | 1583 | 30.710 | 36.201 | 49.672 | 1.00 | 26.86 | O |
| HETATM13848 | O | HOH | 1584 | 13.067 | 32.240 | 36.004 | 1.00 | 36.88 | O |
| HETATM13849 | O | HOH | 1585 | 27.914 | 81.063 | 41.311 | 1.00 | 31.96 | O |
| HETATM13850 | O | HOH | 1586 | 13.080 | 23.711 | 66.248 | 1.00 | 32.39 | O |
| HETATM13851 | O | HOH | 1587 | 9.882 | 47.426 | 29.871 | 1.00 | 32.21 | O |
| HETATM13852 | O | HOH | 1588 | 34.062 | 53.935 | 74.109 | 1.00 | 29.51 | O |
| HETATM13853 | O | HOH | 1589 | 8.528 | 58.796 | 60.647 | 1.00 | 44.14 | O |
| HETATM13854 | O | HOH | 1590 | 9.789 | 38.093 | 98.670 | 1.00 | 44.41 | O |
| HETATM13855 | O | HOH | 1591 | 21.599 | 78.672 | 89.504 | 1.00 | 37.19 | O |
| HETATM13856 | O | HOH | 1592 | 10.790 | 40.392 | 23.265 | 1.00 | 37.44 | O |
| HETATM13857 | O | HOH | 1593 | 18.362 | 65.239 | 58.004 | 1.00 | 52.92 | O |
| HETATM13858 | O | HOH | 1594 | -22.727 | 57.853 | 40.841 | 1.00 | 43.07 | O |
| HETATM13859 | O | HOH | 1595 | -9.618 | 81.002 | 34.479 | 1.00 | 41.54 | O |
| HETATM13860 | O | HOH | 1596 | -5.604 | 76.868 | 87.816 | 1.00 | 34.96 | O |
| HETATM13861 | O | HOH | 1597 | 7.440 | 113.752 | 56.808 | 1.00 | 40.64 | O |
| HETATM13862 | O | HOH | 1598 | 31.620 | 88.127 | 88.410 | 1.00 | 52.41 | O |
| HETATM13863 | O | HOH | 1599 | 21.582 | 17.856 | 57.263 | 1.00 | 39.71 | O |
| HETATM13864 | O | HOH | 1600 | 14.019 | 47.145 | 29.710 | 1.00 | 40.15 | O |
| HETATM13865 | O | HOH | 1601 | 4.841 | 32.382 | 83.023 | 1.00 | 34.45 | O |
| HETATM13866 | O | HOH | 1602 | 26.249 | 85.837 | 22.083 | 1.00 | 47.55 | O |
| HETATM13867 | O | HOH | 1603 | 12.008 | 80.815 | 98.600 | 1.00 | 40.39 | O |
| HETATM13868 | O | HOH | 1604 | 3.101 | 29.460 | 63.131 | 1.00 | 35.49 | O |
| HETATM13869 | O | HOH | 1605 | 19.857 | 35.267 | 81.628 | 1.00 | 31.98 | O |
| HETATM13870 | O | HOH | 1606 | 16.271 | 27.231 | 48.318 | 1.00 | 36.21 | O |
| HETATM13871 | O | HOH | 1607 | -12.401 | 71.556 | 24.157 | 1.00 | 37.20 | O |
| HETATM13872 | O | HOH | 1608 | 9.461 | 56.658 | 21.386 | 1.00 | 32.64 | O |
| HETATM13873 | O | HOH | 1609 | 43.901 | 48.801 | 49.743 | 1.00 | 37.67 | O |
| HETATM13874 | O | HOH | 1610 | -10.852 | 39.304 | 48.822 | 1.00 | 32.25 | O |
| HETATM13875 | O | HOH | 1611 | -15.279 | 43.482 | 73.194 | 1.00 | 33.62 | O |
| HETATM13876 | O | HOH | 1612 | -2.160 | 53.221 | 20.706 | 1.00 | 38.57 | O |
| HETATM13877 | O | HOH | 1613 | 9.410 | 65.478 | 58.038 | 1.00 | 34.37 | O |
| HETATM13878 | O | HOH | 1614 | -16.897 | 81.828 | 43.919 | 1.00 | 41.93 | O |
| HETATM13879 | O | HOH | 1615 | 17.885 | 60.358 | 17.477 | 1.00 | 31.37 | O |
| HETATM13880 | O | HOH | 1616 | 7.419 | 55.862 | 11.367 | 1.00 | 52.26 | O |
| HETATM13881 | O | HOH | 1617 | 47.557 | 64.797 | 41.211 | 1.00 | 30.77 | O |
| HETATM13882 | O | HOH | 1618 | 12.899 | 43.406 | 19.674 | 1.00 | 33.14 | O |
| HETATM13883 | O | HOH | 1619 | 9.713 | 57.490 | 65.001 | 1.00 | 34.46 | O |
| HETATM13884 | O | HOH | 1620 | 0.983 | 43.017 | 96.467 | 1.00 | 44.57 | O |
| HETATM13885 | O | HOH | 1621 | 9.577 | 42.722 | 18.185 | 1.00 | 39.40 | O |
| HETATM13886 | O | HOH | 1622 | 16.379 | 66.806 | 21.685 | 1.00 | 36.52 | O |
| HETATM13887 | O | HOH | 1623 | 14.444 | 78.998 | 21.328 | 1.00 | 47.66 | O |
| HETATM13888 | O | HOH | 1624 | -25.970 | 76.512 | 67.430 | 1.00 | 40.25 | O |
| HETATM13889 | O | HOH | 1625 | 22.566 | 89.841 | 89.422 | 1.00 | 30.61 | O |
| HETATM13890 | O | HOH | 1626 | 23.407 | 92.406 | 44.452 | 1.00 | 45.96 | O |
| HETATM13891 | O | HOH | 1627 | 43.701 | 58.776 | 40.658 | 1.00 | 40.15 | O |
| HETATM13892 | O | HOH | 1628 | -7.467 | 82.941 | 35.280 | 1.00 | 48.35 | O |
| HETATM13893 | O | HOH | 1629 | 17.767 | 52.121 | 36.267 | 1.00 | 40.61 | O |
| HETATM13894 | O | HOH | 1630 | 25.906 | 54.780 | 36.048 | 1.00 | 38.16 | O |
| HETATM13895 | O | HOH | 1631 | 15.340 | 67.585 | 26.560 | 1.00 | 30.76 | O |
| HETATM13896 | O | HOH | 1632 | 4.161 | 75.279 | 82.384 | 1.00 | 48.55 | O |
| HETATM13897 | O | HOH | 1633 | 8.653 | 114.853 | 58.521 | 1.00 | 33.37 | O |
| HETATM13898 | O | HOH | 1634 | 23.548 | 103.141 | 54.086 | 1.00 | 39.19 | O |
| HETATM13899 | O | HOH | 1635 | 6.016 | 44.009 | 23.592 | 1.00 | 36.80 | O |
| HETATM13900 | O | HOH | 1636 | 0.652 | 95.107 | 42.906 | 1.00 | 40.15 | O |
| HETATM13901 | O | HOH | 1637 | -8.697 | 41.060 | 34.963 | 1.00 | 33.67 | O |
| HETATM13902 | O | HOH | 1638 | 4.534 | 57.697 | 54.179 | 1.00 | 14.87 | O |
| HETATM13903 | O | HOH | 1639 | 8.664 | 69.644 | 70.942 | 1.00 | 13.24 | O |
| HETATM13904 | O | HOH | 1640 | 8.046 | 62.701 | 46.244 | 1.00 | 10.28 | O |
| HETATM13905 | O | HOH | 1641 | 8.723 | 50.490 | 63.631 | 1.00 | 13.94 | O |
| HETATM13906 | O | HOH | 1642 | 13.501 | 57.721 | 47.836 | 1.00 | 13.82 | O |
| HETATM13907 | O | HOH | 1643 | 16.169 | 53.477 | 67.507 | 1.00 | 11.56 | O |
| HETATM13908 | O | HOH | 1644 | -15.121 | 59.595 | 84.715 | 1.00 | 16.08 | O |
| HETATM13909 | O | HOH | 1645 | 15.526 | 68.096 | 69.543 | 1.00 | 14.52 | O |
| HETATM13910 | O | HOH | 1646 | 20.651 | 69.026 | 64.453 | 1.00 | 15.74 | O |
| HETATM13911 | O | HOH | 1647 | 15.495 | 70.700 | 70.288 | 1.00 | 13.17 | O |
| HETATM13912 | O | HOH | 1648 | 3.009 | 56.785 | 57.568 | 1.00 | 15.70 | O |
| HETATM13913 | O | HOH | 1649 | 28.446 | 89.399 | 78.463 | 1.00 | 28.94 | O |

| HETATM13914 | O | HOH | 1650 | 20.563 | 63.309 | 51.588 | 1.00 | 19.28 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13915 | O | HOH | 1651 | 10.223 | 66.667 | 25.667 | 1.00 | 23.13 | O |
| HETATM13916 | O | HOH | 1652 | -10.755 | 66.252 | 61.594 | 1.00 | 22.10 | O |
| HETATM13917 | O | HOH | 1653 | -3.417 | 50.007 | 51.350 | 1.00 | 24.57 | O |
| HETATM13918 | O | HOH | 1654 | -10.240 | 60.678 | 29.295 | 1.00 | 21.17 | O |
| HETATM13919 | O | HOH | 1655 | 9.051 | 52.793 | 65.706 | 1.00 | 24.62 | O |
| HETATM13920 | O | HOH | 1656 | 17.140 | 70.240 | 56.820 | 1.00 | 27.53 | O |
| HETATM13921 | O | HOH | 1657 | -3.843 | 39.058 | 38.283 | 1.00 | 35.78 | O |
| HETATM13922 | O | HOH | 1658 | 29.495 | 67.755 | 49.277 | 1.00 | 26.93 | O |
| HETATM13923 | O | HOH | 1659 | -13.012 | 51.166 | 34.310 | 1.00 | 22.28 | O |
| HETATM13924 | O | HOH | 1660 | -9.587 | 57.823 | 30.538 | 1.00 | 24.96 | O |
| HETATM13925 | O | HOH | 1661 | 25.150 | 63.060 | 69.661 | 1.00 | 29.02 | O |
| HETATM13926 | O | HOH | 1662 | 20.561 | 76.980 | 94.356 | 1.00 | 42.72 | O |
| HETATM13927 | O | HOH | 1663 | -8.657 | 70.926 | 63.450 | 1.00 | 25.31 | O |
| HETATM13928 | O | HOH | 1664 | 1.861 | 36.426 | 51.922 | 1.00 | 27.80 | O |
| HETATM13929 | O | HOH | 1665 | 13.241 | 46.202 | 85.067 | 1.00 | 20.85 | O |
| HETATM13930 | O | HOH | 1666 | 6.513 | 56.303 | 96.689 | 1.00 | 31.77 | O |
| HETATM13931 | O | HOH | 1667 | 3.083 | 66.405 | 57.947 | 1.00 | 32.17 | O |
| HETATM13932 | O | HOH | 1668 | 4.787 | 31.791 | 58.818 | 1.00 | 27.67 | O |
| HETATM13933 | O | HOH | 1669 | 37.323 | 68.659 | 75.688 | 1.00 | 43.86 | O |
| HETATM13934 | O | HOH | 1670 | 12.562 | 78.201 | 46.088 | 1.00 | 24.28 | O |
| HETATM13935 | O | HOH | 1671 | 3.283 | 86.170 | 19.045 | 1.00 | 31.59 | O |
| HETATM13936 | O | HOH | 1672 | -5.769 | 60.356 | 54.667 | 1.00 | 29.48 | O |
| HETATM13937 | O | HOH | 1673 | -6.508 | 88.002 | 73.074 | 1.00 | 33.30 | O |
| HETATM13938 | O | HOH | 1674 | 30.611 | 36.385 | 74.891 | 1.00 | 32.76 | O |
| HETATM13939 | O | HOH | 1675 | -14.174 | 55.809 | 58.225 | 1.00 | 26.46 | O |
| HETATM13940 | O | HOH | 1676 | -4.065 | 101.567 | 46.061 | 1.00 | 23.83 | O |
| HETATM13941 | O | HOH | 1677 | 34.204 | 29.530 | 66.929 | 1.00 | 40.14 | O |
| HETATM13942 | O | HOH | 1678 | 12.896 | 50.028 | 30.761 | 1.00 | 24.88 | O |
| HETATM13943 | O | HOH | 1679 | 28.947 | 92.061 | 74.007 | 1.00 | 30.40 | O |
| HETATM13944 | O | HOH | 1680 | 33.683 | 87.967 | 76.052 | 1.00 | 30.41 | O |
| HETATM13945 | O | HOH | 1681 | 41.360 | 48.578 | 48.730 | 1.00 | 26.88 | O |
| HETATM13946 | O | HOH | 1682 | 8.757 | 91.018 | 88.740 | 1.00 | 29.59 | O |
| HETATM13947 | O | HOH | 1683 | 28.647 | 46.479 | 22.935 | 1.00 | 34.59 | O |
| HETATM13948 | O | HOH | 1684 | 22.648 | 48.119 | 85.453 | 1.00 | 30.70 | O |
| HETATM13949 | O | HOH | 1685 | -16.194 | 57.602 | 83.677 | 1.00 | 20.73 | O |
| HETATM13950 | O | HOH | 1686 | 30.572 | 67.258 | 69.746 | 1.00 | 28.01 | O |
| HETATM13951 | O | HOH | 1687 | -5.116 | 65.627 | 59.300 | 1.00 | 26.10 | O |
| HETATM13952 | O | HOH | 1688 | 41.109 | 45.096 | 48.034 | 1.00 | 28.49 | O |
| HETATM13953 | O | HOH | 1689 | 11.684 | 61.905 | 56.290 | 1.00 | 23.61 | O |
| HETATM13954 | O | HOH | 1690 | 40.124 | 74.418 | 85.323 | 1.00 | 33.04 | O |
| HETATM13955 | O | HOH | 1691 | -6.425 | 84.025 | 63.346 | 1.00 | 25.28 | O |
| HETATM13956 | O | HOH | 1692 | 29.109 | 68.641 | 53.520 | 1.00 | 26.44 | O |
| HETATM13957 | O | HOH | 1693 | 39.533 | 53.331 | 56.258 | 1.00 | 23.98 | O |
| HETATM13958 | O | HOH | 1694 | 35.437 | 66.924 | 39.407 | 1.00 | 27.41 | O |
| HETATM13959 | O | HOH | 1695 | 27.127 | 35.394 | 51.405 | 1.00 | 26.49 | O |
| HETATM13960 | O | HOH | 1696 | 6.854 | 82.344 | 57.771 | 1.00 | 26.65 | O |
| HETATM13961 | O | HOH | 1697 | -17.988 | 65.745 | 61.884 | 1.00 | 37.44 | O |
| HETATM13962 | O | HOH | 1698 | -13.776 | 68.099 | 89.550 | 1.00 | 33.97 | O |
| HETATM13963 | O | HOH | 1699 | -13.812 | 58.377 | 99.022 | 1.00 | 37.02 | O |
| HETATM13964 | O | HOH | 1700 | 22.996 | 62.783 | 59.745 | 1.00 | 27.95 | O |
| HETATM13965 | O | HOH | 1701 | 31.123 | 83.793 | 44.844 | 1.00 | 37.47 | O |
| HETATM13966 | O | HOH | 1702 | 22.258 | 49.675 | 40.707 | 1.00 | 30.56 | O |
| HETATM13967 | O | HOH | 1703 | 23.896 | 57.843 | 36.009 | 1.00 | 33.88 | O |
| HETATM13968 | O | HOH | 1704 | -14.206 | 83.665 | 67.933 | 1.00 | 31.70 | O |
| HETATM13969 | O | HOH | 1705 | 26.761 | 52.662 | 79.393 | 1.00 | 24.32 | O |
| HETATM13970 | O | HOH | 1706 | 17.485 | 68.677 | 63.767 | 1.00 | 34.07 | O |
| HETATM13971 | O | HOH | 1707 | 35.888 | 52.266 | 34.795 | 1.00 | 30.26 | O |
| HETATM13972 | O | HOH | 1708 | -0.814 | 86.247 | 96.670 | 1.00 | 42.56 | O |
| HETATM13973 | O | HOH | 1709 | -22.432 | 72.389 | 61.532 | 1.00 | 32.84 | O |
| HETATM13974 | O | HOH | 1710 | 20.677 | 47.439 | 25.846 | 1.00 | 38.41 | O |
| HETATM13975 | O | HOH | 1711 | -5.411 | 69.696 | 59.785 | 1.00 | 30.08 | O |
| HETATM13976 | O | HOH | 1712 | 23.123 | 25.861 | 67.527 | 1.00 | 25.76 | O |
| HETATM13977 | O | HOH | 1713 | -19.484 | 56.123 | 69.860 | 1.00 | 37.87 | O |
| HETATM13978 | O | HOH | 1714 | 9.076 | 69.525 | 33.454 | 1.00 | 40.13 | O |
| HETATM13979 | O | HOH | 1715 | 19.188 | 78.431 | 90.217 | 1.00 | 42.73 | O |
| HETATM13980 | O | HOH | 1716 | 15.477 | 23.422 | 60.957 | 1.00 | 34.08 | O |
| HETATM13981 | O | HOH | 1717 | -13.238 | 48.556 | 33.957 | 1.00 | 33.83 | O |
| HETATM13982 | O | HOH | 1718 | 26.878 | 75.682 | 37.278 | 1.00 | 31.87 | O |
| HETATM13983 | O | HOH | 1719 | 24.305 | 64.540 | 89.297 | 1.00 | 28.52 | O |
| HETATM13984 | O | HOH | 1720 | 19.752 | 31.552 | 75.023 | 1.00 | 34.67 | O |
| HETATM13985 | O | HOH | 1721 | 11.515 | 35.580 | 36.767 | 1.00 | 36.93 | O |
| HETATM13986 | O | HOH | 1722 | 7.312 | 55.946 | 21.240 | 1.00 | 36.44 | O |
| HETATM13987 | O | HOH | 1723 | 30.365 | 68.321 | 33.450 | 1.00 | 30.10 | O |
| HETATM13988 | O | HOH | 1724 | 40.757 | 61.501 | 49.543 | 1.00 | 37.96 | O |
| HETATM13989 | O | HOH | 1725 | -9.873 | 85.215 | 56.599 | 1.00 | 29.77 | O |
| HETATM13990 | O | HOH | 1726 | 14.508 | 55.760 | 96.219 | 1.00 | 34.97 | O |
| HETATM13991 | O | HOH | 1727 | 12.405 | 79.948 | 79.318 | 1.00 | 24.68 | O |
| HETATM13992 | O | HOH | 1728 | 10.720 | 34.737 | 33.805 | 1.00 | 41.05 | O |
| HETATM13993 | O | HOH | 1729 | -16.974 | 60.480 | 41.953 | 1.00 | 35.69 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13994 | O | HOH | 1730 | -8.405 | 68.728 | 98.557 | 1.00 | 27.99 | O |
| HETATM13995 | O | HOH | 1731 | 11.133 | 85.519 | 49.383 | 1.00 | 29.40 | O |
| HETATM13996 | O | HOH | 1732 | -1.467 | 81.189 | 56.643 | 1.00 | 24.87 | O |
| HETATM13997 | O | HOH | 1733 | -4.838 | 87.744 | 29.599 | 1.00 | 33.25 | O |
| HETATM13998 | O | HOH | 1734 | 35.173 | 73.009 | 75.514 | 1.00 | 43.58 | O |
| HETATM13999 | O | HOH | 1735 | 40.676 | 44.130 | 50.396 | 1.00 | 28.32 | O |
| HETATM14000 | O | HOH | 1736 | 10.559 | 76.253 | 86.517 | 1.00 | 30.96 | O |
| HETATM14001 | O | HOH | 1737 | 23.932 | 34.975 | 50.827 | 1.00 | 31.88 | O |
| HETATM14002 | O | HOH | 1738 | 1.454 | 53.738 | 17.589 | 1.00 | 32.88 | O |
| HETATM14003 | O | HOH | 1739 | 24.726 | 62.237 | 72.309 | 1.00 | 31.44 | O |
| HETATM14004 | O | HOH | 1740 | 29.241 | 55.869 | 29.335 | 1.00 | 33.75 | O |
| HETATM14005 | O | HOH | 1741 | 16.821 | 36.038 | 89.235 | 1.00 | 36.14 | O |
| HETATM14006 | O | HOH | 1742 | 8.072 | 93.651 | 34.129 | 1.00 | 25.25 | O |
| HETATM14007 | O | HOH | 1743 | 37.714 | 67.227 | 56.877 | 1.00 | 27.21 | O |
| HETATM14008 | O | HOH | 1744 | -20.949 | 77.350 | 66.256 | 1.00 | 34.66 | O |
| HETATM14009 | O | HOH | 1745 | -14.254 | 50.793 | 50.342 | 1.00 | 30.53 | O |
| HETATM14010 | O | HOH | 1746 | -5.226 | 37.953 | 97.047 | 1.00 | 39.63 | O |
| HETATM14011 | O | HOH | 1747 | -13.812 | 69.275 | 92.343 | 1.00 | 28.55 | O |
| HETATM14012 | O | HOH | 1748 | 2.107 | 80.677 | 19.831 | 1.00 | 36.98 | O |
| HETATM14013 | O | HOH | 1749 | 9.130 | 86.899 | 29.095 | 1.00 | 42.40 | O |
| HETATM14014 | O | HOH | 1750 | -12.765 | 49.903 | 103.351 | 1.00 | 37.83 | O |
| HETATM14015 | O | HOH | 1751 | -16.317 | 41.411 | 47.143 | 1.00 | 33.86 | O |
| HETATM14016 | O | HOH | 1752 | 14.317 | 55.515 | 65.695 | 1.00 | 28.44 | O |
| HETATM14017 | O | HOH | 1753 | 23.375 | 18.119 | 64.297 | 1.00 | 33.29 | O |
| HETATM14018 | O | HOH | 1754 | -11.421 | 75.432 | 44.618 | 1.00 | 36.73 | O |
| HETATM14019 | O | HOH | 1755 | 3.318 | 72.362 | 81.659 | 1.00 | 26.63 | O |
| HETATM14020 | O | HOH | 1756 | 1.516 | 76.012 | 86.973 | 1.00 | 29.68 | O |
| HETATM14021 | O | HOH | 1757 | 20.109 | 40.203 | 50.528 | 1.00 | 29.51 | O |
| HETATM14022 | O | HOH | 1758 | 20.442 | 59.700 | 16.877 | 1.00 | 36.59 | O |
| HETATM14023 | O | HOH | 1759 | 8.469 | 78.705 | 89.654 | 1.00 | 44.05 | O |
| HETATM14024 | O | HOH | 1760 | 22.636 | 66.484 | 27.559 | 1.00 | 32.88 | O |
| HETATM14025 | O | HOH | 1761 | 8.384 | 75.874 | 82.982 | 1.00 | 40.04 | O |
| HETATM14026 | O | HOH | 1762 | -6.564 | 74.104 | 103.073 | 1.00 | 30.90 | O |
| HETATM14027 | O | HOH | 1763 | -12.970 | 52.313 | 42.359 | 1.00 | 35.42 | O |
| HETATM14028 | O | HOH | 1764 | -8.091 | 56.244 | 32.344 | 1.00 | 37.47 | O |
| HETATM14029 | O | HOH | 1765 | 16.956 | 26.261 | 70.150 | 1.00 | 31.85 | O |
| HETATM14030 | O | HOH | 1766 | 21.124 | 54.573 | 35.340 | 1.00 | 35.72 | O |
| HETATM14031 | O | HOH | 1767 | 27.862 | 68.249 | 88.396 | 1.00 | 38.78 | O |
| HETATM14032 | O | HOH | 1768 | 7.722 | 42.786 | 42.037 | 1.00 | 27.42 | O |
| HETATM14033 | O | HOH | 1769 | 16.465 | 66.920 | 85.929 | 1.00 | 25.93 | O |
| HETATM14034 | O | HOH | 1770 | 36.775 | 65.779 | 83.909 | 1.00 | 30.46 | O |
| HETATM14035 | O | HOH | 1771 | 15.828 | 75.856 | 23.667 | 1.00 | 38.95 | O |
| HETATM14036 | O | HOH | 1772 | -14.582 | 83.353 | 28.353 | 1.00 | 36.43 | O |
| HETATM14037 | O | HOH | 1773 | 39.231 | 50.557 | 45.373 | 1.00 | 35.22 | O |
| HETATM14038 | O | HOH | 1774 | 7.766 | 64.650 | 15.102 | 1.00 | 39.30 | O |
| HETATM14039 | O | HOH | 1775 | 12.357 | 53.552 | 36.285 | 1.00 | 30.11 | O |
| HETATM14040 | O | HOH | 1776 | 3.681 | 101.448 | 57.674 | 1.00 | 34.73 | O |
| HETATM14041 | O | HOH | 1777 | 4.807 | 97.910 | 75.003 | 1.00 | 36.39 | O |
| HETATM14042 | O | HOH | 1778 | 27.734 | 56.369 | 24.433 | 1.00 | 31.90 | O |
| HETATM14043 | O | HOH | 1779 | 13.384 | 33.516 | 84.523 | 1.00 | 31.05 | O |
| HETATM14044 | O | HOH | 1780 | 14.803 | 99.485 | 88.642 | 1.00 | 41.19 | O |
| HETATM14045 | O | HOH | 1781 | -8.008 | 78.036 | 20.414 | 1.00 | 33.38 | O |
| HETATM14046 | O | HOH | 1782 | 9.438 | 34.759 | 38.537 | 1.00 | 27.61 | O |
| HETATM14047 | O | HOH | 1783 | 35.403 | 83.411 | 68.720 | 1.00 | 37.71 | O |
| HETATM14048 | O | HOH | 1784 | -14.443 | 75.509 | 79.203 | 1.00 | 41.29 | O |
| HETATM14049 | O | HOH | 1785 | 31.532 | 69.576 | 53.388 | 1.00 | 27.98 | O |
| HETATM14050 | O | HOH | 1786 | 7.040 | 73.480 | 52.196 | 1.00 | 37.34 | O |
| HETATM14051 | O | HOH | 1787 | -20.068 | 67.657 | 46.561 | 1.00 | 41.85 | O |
| HETATM14052 | O | HOH | 1788 | 7.649 | 31.746 | 86.053 | 1.00 | 52.49 | O |
| HETATM14053 | O | HOH | 1789 | 25.303 | 61.070 | 33.900 | 1.00 | 40.13 | O |
| HETATM14054 | O | HOH | 1790 | -11.494 | 39.757 | 88.019 | 1.00 | 38.11 | O |
| HETATM14055 | O | HOH | 1791 | 25.429 | 58.193 | 87.475 | 1.00 | 30.98 | O |
| HETATM14056 | O | HOH | 1792 | 36.298 | 34.692 | 35.540 | 1.00 | 32.55 | O |
| HETATM14057 | O | HOH | 1793 | 3.565 | 32.743 | 51.540 | 1.00 | 41.18 | O |
| HETATM14058 | O | HOH | 1794 | -6.107 | 86.475 | 78.014 | 1.00 | 29.34 | O |
| HETATM14059 | O | HOH | 1795 | 13.794 | 65.670 | 61.039 | 1.00 | 38.92 | O |
| HETATM14060 | O | HOH | 1796 | -3.666 | 58.885 | 56.195 | 1.00 | 39.51 | O |
| HETATM14061 | O | HOH | 1797 | 2.012 | 63.183 | 56.583 | 1.00 | 35.39 | O |
| HETATM14062 | O | HOH | 1798 | 40.154 | 41.974 | 37.269 | 1.00 | 39.68 | O |
| HETATM14063 | O | HOH | 1799 | 28.078 | 29.309 | 36.826 | 1.00 | 38.96 | O |
| HETATM14064 | O | HOH | 1800 | -9.760 | 67.775 | 95.099 | 1.00 | 30.48 | O |
| HETATM14065 | O | HOH | 1801 | -13.872 | 76.533 | 52.444 | 1.00 | 29.65 | O |
| HETATM14066 | O | HOH | 1802 | 0.673 | 56.102 | 15.810 | 1.00 | 38.55 | O |
| HETATM14067 | O | HOH | 1803 | 29.104 | 66.583 | 61.705 | 1.00 | 39.95 | O |
| HETATM14068 | O | HOH | 1804 | -4.847 | 53.711 | 22.266 | 1.00 | 38.33 | O |
| HETATM14069 | O | HOH | 1805 | -9.072 | 77.666 | 94.539 | 1.00 | 34.92 | O |
| HETATM14070 | O | HOH | 1806 | 7.587 | 41.510 | 23.797 | 1.00 | 41.81 | O |
| HETATM14071 | O | HOH | 1807 | 14.712 | 57.006 | 41.183 | 1.00 | 27.33 | O |
| HETATM14072 | O | HOH | 1808 | 1.338 | 76.972 | 73.575 | 1.00 | 44.14 | O |
| HETATM14073 | O | HOH | 1809 | 12.020 | 72.174 | 57.717 | 1.00 | 43.20 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM14074 | O | HOH | 1810 | 10.276 | 82.477 | 98.058 | 1.00 41.19 | | O |
| HETATM14075 | O | HOH | 1811 | 36.060 | 84.974 | 66.376 | 1.00 41.65 | | O |
| HETATM14076 | O | HOH | 1812 | -8.253 | 88.580 | 45.562 | 1.00 40.81 | | O |
| HETATM14077 | O | HOH | 1813 | 37.295 | 25.223 | 62.199 | 1.00 39.20 | | O |
| HETATM14078 | O | HOH | 1814 | 27.379 | 61.825 | 87.888 | 1.00 37.71 | | O |
| HETATM14079 | O | HOH | 1815 | -3.347 | 81.463 | 74.078 | 1.00 32.01 | | O |
| HETATM14080 | O | HOH | 1816 | 5.454 | 44.992 | 21.213 | 1.00 35.31 | | O |
| HETATM14081 | O | HOH | 1817 | 29.801 | 86.369 | 55.826 | 1.00 34.41 | | O |
| HETATM14082 | O | HOH | 1818 | 16.520 | 32.311 | 43.769 | 1.00 36.23 | | O |
| HETATM14083 | O | HOH | 1819 | 26.329 | 24.384 | 66.411 | 1.00 31.85 | | O |
| HETATM14084 | O | HOH | 1820 | 8.482 | 60.681 | 97.130 | 1.00 32.83 | | O |
| HETATM14085 | O | HOH | 1821 | 24.902 | 61.340 | 87.841 | 1.00 36.43 | | O |
| HETATM14086 | O | HOH | 1822 | 40.969 | 70.792 | 40.888 | 1.00 41.94 | | O |
| HETATM14087 | O | HOH | 1823 | 5.612 | 60.278 | 57.771 | 1.00 42.97 | | O |
| HETATM14088 | O | HOH | 1824 | 17.852 | 47.418 | 26.867 | 1.00 36.73 | | O |
| HETATM14089 | O | HOH | 1825 | 14.340 | 83.683 | 97.988 | 1.00 38.77 | | O |
| HETATM14090 | O | HOH | 1826 | 13.006 | 66.691 | 58.088 | 1.00 39.66 | | O |
| HETATM14091 | O | HOH | 1827 | -0.046 | 72.258 | 81.005 | 1.00 42.37 | | O |
| HETATM14092 | O | HOH | 1828 | -19.384 | 55.737 | 81.567 | 1.00 33.66 | | O |
| HETATM14093 | O | HOH | 1829 | 28.424 | 60.400 | 24.945 | 1.00 44.80 | | O |
| HETATM14094 | O | HOH | 1830 | -5.425 | 72.529 | 60.438 | 1.00 34.20 | | O |
| HETATM14095 | O | HOH | 1831 | -18.041 | 52.788 | 82.735 | 1.00 42.01 | | O |
| HETATM14096 | O | HOH | 1832 | 20.856 | 32.411 | 71.048 | 1.00 34.98 | | O |
| HETATM14097 | O | HOH | 1833 | -18.141 | 55.734 | 85.166 | 1.00 37.39 | | O |
| HETATM14098 | O | HOH | 1834 | 7.157 | 75.809 | 80.466 | 1.00 37.00 | | O |
| HETATM14099 | O | HOH | 1835 | 9.240 | 93.847 | 29.650 | 1.00 44.45 | | O |
| HETATM14100 | O | HOH | 1836 | -13.204 | 72.277 | 88.800 | 1.00 28.17 | | O |
| HETATM14101 | O | HOH | 1837 | 37.429 | 70.019 | 57.066 | 1.00 30.06 | | O |
| HETATM14102 | O | HOH | 1838 | 35.051 | 31.910 | 68.964 | 1.00 33.77 | | O |
| HETATM14103 | O | HOH | 1839 | 40.879 | 30.684 | 49.706 | 1.00 40.31 | | O |
| HETATM14104 | O | HOH | 1840 | 15.969 | 67.447 | 18.002 | 1.00 40.72 | | O |
| HETATM14105 | O | HOH | 1841 | 0.442 | 92.263 | 62.343 | 1.00 31.66 | | O |
| HETATM14106 | O | HOH | 1842 | -9.605 | 81.548 | 39.212 | 1.00 42.50 | | O |
| HETATM14107 | O | HOH | 1843 | -17.807 | 57.080 | 66.420 | 1.00 30.00 | | O |
| HETATM14108 | O | HOH | 1844 | 11.056 | 100.530 | 90.912 | 1.00 43.67 | | O |
| HETATM14109 | O | HOH | 1845 | 6.850 | 66.953 | 101.364 | 1.00 33.11 | | O |
| HETATM14110 | O | HOH | 1846 | 9.967 | 45.568 | 35.217 | 1.00 27.40 | | O |
| HETATM14111 | O | HOH | 1847 | 18.628 | 28.418 | 47.171 | 1.00 40.89 | | O |
| HETATM14112 | O | HOH | 1848 | 16.529 | 86.173 | 95.347 | 1.00 40.26 | | O |
| HETATM14113 | O | HOH | 1849 | 7.527 | 66.728 | 57.187 | 1.00 41.61 | | O |
| HETATM14114 | O | HOH | 1850 | 12.199 | 51.743 | 64.509 | 1.00 32.81 | | O |
| HETATM14115 | O | HOH | 1851 | 24.916 | 68.671 | 93.082 | 1.00 29.13 | | O |
| HETATM14116 | O | HOH | 1852 | 36.313 | 70.760 | 74.763 | 1.00 28.75 | | O |
| HETATM14117 | O | HOH | 1853 | -14.712 | 61.178 | 30.728 | 1.00 36.37 | | O |
| HETATM14118 | O | HOH | 1854 | -18.203 | 62.069 | 35.218 | 1.00 41.12 | | O |
| HETATM14119 | O | HOH | 1855 | -1.381 | 32.964 | 63.877 | 1.00 43.60 | | O |
| HETATM14120 | O | HOH | 1856 | 5.165 | 94.357 | 72.611 | 1.00 36.42 | | O |
| HETATM14121 | O | HOH | 1857 | 32.634 | 62.050 | 86.548 | 1.00 32.91 | | O |
| HETATM14122 | O | HOH | 1858 | 23.236 | 82.154 | 26.931 | 1.00 37.33 | | O |
| HETATM14123 | O | HOH | 1859 | 2.173 | 60.886 | 60.063 | 1.00 36.91 | | O |
| HETATM14124 | O | HOH | 1860 | 30.749 | 78.946 | 90.690 | 1.00 52.95 | | O |
| HETATM14125 | O | HOH | 1861 | -0.801 | 33.914 | 86.014 | 1.00 33.95 | | O |
| HETATM14126 | O | HOH | 1862 | 7.568 | 95.118 | 74.172 | 1.00 35.17 | | O |
| HETATM14127 | O | HOH | 1863 | 36.279 | 71.709 | 61.151 | 1.00 31.95 | | O |
| HETATM14128 | O | HOH | 1864 | 23.901 | 89.399 | 91.711 | 1.00 40.72 | | O |
| HETATM14129 | O | HOH | 1865 | 37.098 | 64.812 | 63.785 | 1.00 36.01 | | O |
| HETATM14130 | O | HOH | 1866 | 12.469 | 70.561 | 26.050 | 1.00 33.05 | | O |
| HETATM14131 | O | HOH | 1867 | 6.664 | 110.618 | 55.830 | 1.00 40.46 | | O |
| HETATM14132 | O | HOH | 1868 | 11.001 | 101.250 | 71.842 | 1.00 42.01 | | O |
| HETATM14133 | O | HOH | 1869 | 44.551 | 56.798 | 42.146 | 1.00 33.68 | | O |
| HETATM14134 | O | HOH | 1870 | -1.922 | 68.441 | 95.826 | 1.00 43.78 | | O |
| HETATM14135 | O | HOH | 1871 | 23.251 | 96.885 | 55.149 | 1.00 44.22 | | O |
| HETATM14136 | O | HOH | 1872 | 12.950 | 75.327 | 54.944 | 1.00 31.34 | | O |
| HETATM14137 | O | HOH | 1873 | 43.645 | 35.622 | 57.068 | 1.00 36.48 | | O |
| HETATM14138 | O | HOH | 1874 | -1.248 | 73.423 | 13.133 | 1.00 41.95 | | O |
| HETATM14139 | O | HOH | 1875 | -20.588 | 69.879 | 32.398 | 1.00 37.40 | | O |
| HETATM14140 | O | HOH | 1876 | 17.224 | 64.492 | 60.414 | 1.00 45.67 | | O |
| HETATM14141 | O | HOH | 1877 | 10.805 | 74.786 | 52.114 | 1.00 32.08 | | O |
| HETATM14142 | O | HOH | 1878 | -24.285 | 73.558 | 63.817 | 1.00 38.88 | | O |
| HETATM14143 | O | HOH | 1879 | -10.627 | 62.462 | 98.974 | 1.00 35.42 | | O |
| HETATM14144 | O | HOH | 1880 | -12.841 | 46.432 | 95.132 | 1.00 36.82 | | O |
| HETATM14145 | O | HOH | 1881 | -29.686 | 69.873 | 62.712 | 1.00 41.68 | | O |
| HETATM14146 | O | HOH | 1882 | -18.538 | 64.911 | 70.302 | 1.00 33.49 | | O |
| HETATM14147 | O | HOH | 1883 | 39.998 | 67.804 | 52.898 | 1.00 45.51 | | O |
| HETATM14148 | O | HOH | 1884 | -20.605 | 70.282 | 39.081 | 1.00 42.03 | | O |
| HETATM14149 | O | HOH | 1885 | 12.295 | 107.484 | 67.027 | 1.00 39.59 | | O |
| HETATM14150 | O | HOH | 1886 | 0.925 | 90.328 | 27.416 | 1.00 22.66 | | O |
| HETATM14151 | O | HOH | 1887 | 48.038 | 65.194 | 52.707 | 1.00 40.94 | | O |
| HETATM14152 | O | HOH | 1888 | 27.900 | 70.551 | 89.886 | 1.00 37.65 | | O |
| HETATM14153 | O | HOH | 1889 | 10.882 | 33.613 | 87.755 | 1.00 31.63 | | O |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HETATM14154 | O | HOH | 1890 | 8.702 | 69.590 | 53.432 | 1.00 | 45.30 | O |
| HETATM14155 | O | HOH | 1891 | 0.763 | 69.962 | 82.171 | 1.00 | 35.15 | O |
| HETATM14156 | O | HOH | 1892 | 6.481 | 23.740 | 65.192 | 1.00 | 55.38 | O |
| HETATM14157 | O | HOH | 1893 | 36.421 | 63.118 | 34.314 | 1.00 | 37.72 | O |
| HETATM14158 | O | HOH | 1894 | 30.692 | 60.808 | 71.501 | 1.00 | 47.58 | O |
| HETATM14159 | O | HOH | 1895 | -22.710 | 49.346 | 51.021 | 1.00 | 44.82 | O |
| HETATM14160 | O | HOH | 1896 | 5.944 | 112.865 | 61.066 | 1.00 | 43.43 | O |
| HETATM14161 | O | HOH | 1897 | 27.062 | 88.570 | 51.273 | 1.00 | 34.67 | O |
| HETATM14162 | O | HOH | 1898 | -16.850 | 73.051 | 39.172 | 1.00 | 36.81 | O |
| HETATM14163 | O | HOH | 1899 | 25.095 | 53.937 | 87.681 | 1.00 | 36.18 | O |
| HETATM14164 | O | HOH | 1900 | -3.419 | 99.656 | 44.473 | 1.00 | 45.45 | O |
| HETATM14165 | O | HOH | 1901 | -22.421 | 65.773 | 83.530 | 1.00 | 45.96 | O |
| HETATM14166 | O | HOH | 1902 | 21.394 | 21.794 | 68.143 | 1.00 | 34.90 | O |
| HETATM14167 | O | HOH | 1903 | -2.710 | 76.811 | 87.251 | 1.00 | 41.39 | O |
| HETATM14168 | O | HOH | 1904 | 7.253 | 74.457 | 75.277 | 1.00 | 36.10 | O |
| HETATM14169 | O | HOH | 1905 | -19.168 | 68.285 | 62.845 | 1.00 | 35.62 | O |
| HETATM14170 | O | HOH | 1906 | 4.359 | 24.244 | 63.629 | 1.00 | 39.34 | O |
| HETATM14171 | O | HOH | 1907 | 22.930 | 33.012 | 72.543 | 1.00 | 41.78 | O |
| HETATM14172 | O | HOH | 1908 | -9.068 | 87.517 | 41.805 | 1.00 | 37.78 | O |
| HETATM14173 | O | HOH | 1909 | 45.472 | 41.387 | 45.564 | 1.00 | 38.40 | O |
| HETATM14174 | O | HOH | 1910 | -7.589 | 40.404 | 57.427 | 1.00 | 32.29 | O |
| HETATM14175 | O | HOH | 1911 | -1.370 | 36.135 | 41.869 | 1.00 | 40.21 | O |
| HETATM14176 | O | HOH | 1912 | -21.128 | 61.075 | 69.890 | 1.00 | 41.60 | O |
| HETATM14177 | O | HOH | 1913 | -5.642 | 43.778 | 99.129 | 1.00 | 43.48 | O |
| HETATM14178 | O | HOH | 1914 | 26.982 | 62.804 | 25.202 | 1.00 | 43.97 | O |
| HETATM14179 | O | HOH | 1915 | -15.000 | 47.151 | 34.340 | 1.00 | 35.04 | O |
| HETATM14180 | O | HOH | 1916 | -18.928 | 54.114 | 33.835 | 1.00 | 37.65 | O |
| HETATM14181 | O | HOH | 1917 | -11.356 | 60.317 | 26.441 | 1.00 | 45.50 | O |
| HETATM14182 | O | HOH | 1918 | 35.944 | 48.416 | 33.526 | 1.00 | 41.46 | O |
| HETATM14183 | O | HOH | 1919 | -17.629 | 55.915 | 41.859 | 1.00 | 44.60 | O |
| HETATM14184 | O | HOH | 1920 | -10.668 | 38.523 | 39.104 | 1.00 | 43.70 | O |
| HETATM14185 | O | HOH | 1921 | 3.518 | 38.463 | 98.081 | 1.00 | 37.13 | O |
| HETATM14186 | O | HOH | 1922 | -1.803 | 49.834 | 101.583 | 1.00 | 37.44 | O |
| HETATM14187 | O | HOH | 1923 | 36.525 | 79.061 | 41.099 | 1.00 | 34.35 | O |
| HETATM14188 | O | HOH | 1924 | 43.241 | 60.389 | 60.933 | 1.00 | 50.57 | O |
| HETATM14189 | O | HOH | 1925 | 29.414 | 53.234 | 89.004 | 1.00 | 38.91 | O |
| HETATM14190 | O | HOH | 1926 | 29.446 | 63.223 | 29.002 | 1.00 | 43.35 | O |
| HETATM14191 | O | HOH | 1927 | -8.781 | 92.504 | 60.222 | 1.00 | 39.08 | O |
| HETATM14192 | O | HOH | 1928 | 16.529 | 64.176 | 63.138 | 1.00 | 42.53 | O |
| HETATM14193 | O | HOH | 1929 | -9.973 | 55.130 | 17.347 | 1.00 | 46.90 | O |
| HETATM14194 | O | HOH | 1930 | 17.007 | 99.006 | 86.519 | 1.00 | 35.10 | O |
| HETATM14195 | O | HOH | 1931 | -8.485 | 70.442 | 19.531 | 1.00 | 40.27 | O |
| HETATM14196 | O | HOH | 1932 | 13.565 | 33.329 | 89.429 | 1.00 | 42.45 | O |
| HETATM14197 | O | HOH | 1933 | 29.343 | 30.321 | 75.192 | 1.00 | 38.44 | O |
| HETATM14198 | O | HOH | 1934 | 29.881 | 59.913 | 73.756 | 1.00 | 32.35 | O |
| HETATM14199 | O | HOH | 1935 | -0.577 | 65.953 | 12.932 | 1.00 | 43.42 | O |
| HETATM14200 | O | HOH | 1936 | 7.781 | 33.139 | 95.346 | 1.00 | 50.34 | O |
| HETATM14201 | O | HOH | 1937 | 7.172 | 37.297 | 24.695 | 1.00 | 39.85 | O |
| HETATM14202 | O | HOH | 1938 | 33.502 | 37.738 | 31.475 | 1.00 | 38.90 | O |
| HETATM14203 | O | HOH | 1939 | 3.356 | 46.489 | 22.269 | 1.00 | 48.49 | O |
| HETATM14204 | O | HOH | 1940 | -13.270 | 52.527 | 27.408 | 1.00 | 45.66 | O |
| HETATM14205 | O | HOH | 1941 | -22.904 | 52.799 | 65.560 | 1.00 | 46.15 | O |
| HETATM14206 | O | HOH | 1942 | 30.376 | 74.373 | 50.240 | 1.00 | 46.15 | O |
| HETATM14207 | O | HOH | 1943 | 40.025 | 74.835 | 46.658 | 1.00 | 40.40 | O |
| HETATM14208 | O | HOH | 1944 | -6.883 | 90.962 | 32.245 | 1.00 | 47.45 | O |
| HETATM14209 | O | HOH | 1945 | -10.488 | 42.525 | 34.337 | 1.00 | 33.37 | O |
| HETATM14210 | O | HOH | 1946 | 24.360 | 44.658 | 87.099 | 1.00 | 49.02 | O |
| HETATM14211 | O | HOH | 1947 | 19.485 | 51.145 | 33.866 | 1.00 | 50.09 | O |
| HETATM14212 | O | HOH | 1948 | -6.774 | 39.326 | 78.988 | 1.00 | 45.93 | O |
| HETATM14213 | O | HOH | 1949 | -15.424 | 52.188 | 33.570 | 1.00 | 30.95 | O |
| HETATM14214 | O | HOH | 1950 | 11.692 | 66.513 | 95.247 | 1.00 | 35.41 | O |
| HETATM14215 | O | HOH | 1951 | -8.236 | 92.271 | 52.484 | 1.00 | 38.06 | O |
| HETATM14216 | O | HOH | 1952 | 28.007 | 56.947 | 26.947 | 1.00 | 40.43 | O |
| HETATM14217 | O | HOH | 1953 | 16.480 | 62.104 | 14.209 | 1.00 | 39.35 | O |
| HETATM14218 | O | HOH | 1954 | 53.908 | 54.378 | 53.514 | 1.00 | 44.30 | O |
| HETATM14219 | O | HOH | 1955 | 26.733 | 71.170 | 32.398 | 1.00 | 30.13 | O |
| HETATM14220 | O | HOH | 1956 | -7.242 | 80.363 | 98.271 | 1.00 | 35.32 | O |
| HETATM14221 | O | HOH | 1957 | -18.319 | 61.393 | 22.603 | 1.00 | 48.35 | O |
| HETATM14222 | O | HOH | 1958 | -3.034 | 39.277 | 40.919 | 1.00 | 41.71 | O |
| HETATM14223 | O | HOH | 1959 | 43.809 | 44.004 | 48.501 | 1.00 | 39.40 | O |
| HETATM14224 | O | HOH | 1960 | 34.648 | 54.574 | 80.715 | 1.00 | 37.73 | O |
| HETATM14225 | O | HOH | 1961 | 43.825 | 31.506 | 45.111 | 1.00 | 40.14 | O |
| HETATM14226 | O | HOH | 1962 | 17.844 | 38.922 | 22.217 | 1.00 | 46.78 | O |
| HETATM14227 | O | HOH | 1963 | -19.622 | 61.695 | 38.554 | 1.00 | 45.54 | O |
| HETATM14228 | O | HOH | 1964 | 9.113 | 105.110 | 54.313 | 1.00 | 43.60 | O |
| HETATM14229 | O | HOH | 1965 | 29.485 | 71.037 | 34.474 | 1.00 | 40.58 | O |
| HETATM14230 | O | HOH | 1966 | 26.009 | 80.622 | 90.341 | 1.00 | 42.56 | O |
| HETATM14231 | O | HOH | 1967 | 17.030 | 102.309 | 58.603 | 1.00 | 41.32 | O |
| HETATM14232 | O | HOH | 1968 | 45.141 | 47.311 | 66.626 | 1.00 | 43.57 | O |
| HETATM14233 | O | HOH | 1969 | 7.368 | 23.365 | 56.243 | 1.00 | 41.06 | O |

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HETATM14234  O   HOH  1970      14.486  40.211  91.869  1.00 34.81           O
HETATM14235  O   HOH  1971     -20.722  74.267  60.545  1.00 35.12           O
HETATM14236  O   HOH  1972       4.285  84.483  97.433  1.00 40.20           O
HETATM14237  O   HOH  1973      21.478  78.841  96.496  1.00 41.99           O
HETATM14238  O   HOH  1974      -7.777  81.674  37.439  1.00 40.66           O
HETATM14239  O   HOH  1975     -25.445  52.598  84.129  1.00 46.07           O
HETATM14240  O   HOH  1976      19.474 112.607  59.870  1.00 42.62           O
HETATM14241  O   HOH  1977      -9.978  34.854  84.428  1.00 49.47           O
HETATM14242  O   HOH  1978      28.771  85.865  79.167  1.00 46.42           O
HETATM14243  O   HOH  1979       1.990  93.440  40.271  1.00 34.42           O
HETATM14244  O   HOH  1980      11.587  22.532  53.291  1.00 40.92           O
HETATM14245  O   HOH  1981      -7.863  81.465  92.251  1.00 48.50           O
HETATM14246  O   HOH  1982       1.768  94.802  97.576  1.00 48.48           O
HETATM14247  O   HOH  1983     -20.580  61.236  86.830  1.00 43.57           O
HETATM14248  O   HOH  1984      24.362  34.068  23.075  1.00 40.05           O
HETATM14249  O   HOH  1985       5.904  46.181  25.221  1.00 40.49           O
HETATM14250  O   HOH  1986      13.658  22.912  68.640  1.00 37.38           O
HETATM14251  O   HOH  1987      24.920  27.245  38.549  1.00 43.56           O
HETATM14252  O   HOH  1988      23.408  88.675  37.344  1.00 33.81           O
HETATM14253  O   HOH  1989     -20.672  42.790  77.789  1.00 42.73           O
HETATM14254  O   HOH  1990      12.605  88.286  27.527  1.00 41.01           O
HETATM14255  O   HOH  1991      26.726  57.381  33.172  1.00 35.85           O
HETATM14256  O   HOH  1992      30.489  66.119  50.992  1.00 23.12           O
HETATM14257  O   HOH  1993       5.042  42.651  59.950  1.00 21.29           O
HETATM14258  O   HOH  1994      17.850  57.362  95.863  1.00 25.00           O
HETATM14259  O   HOH  1995      20.539  52.910  75.926  1.00 21.75           O
HETATM14260  O   HOH  1996       7.960  93.294  75.914  1.00 30.23           O
HETATM14261  O   HOH  1997       4.998  75.626  74.811  1.00 31.26           O
HETATM14262  O   HOH  1998      15.114  50.159  86.824  1.00 24.84           O
HETATM14263  O   HOH  1999      12.306  86.577  67.200  1.00 40.85           O
HETATM14264  O   HOH  2000      19.958  60.494  37.308  1.00 35.66           O
HETATM14265  O   HOH  2001       6.267  57.694  81.971  1.00 30.61           O
HETATM14266  O   HOH  2002       2.746  62.742  63.636  1.00 22.13           O
HETATM14267  O   HOH  2003      27.762  59.115  35.735  1.00 27.18           O
HETATM14268  O   HOH  2004     -11.116  77.989  45.564  1.00 29.14           O
HETATM14269  O   HOH  2005       5.986  73.483  80.956  1.00 25.98           O
HETATM14270  O   HOH  2006     -10.801  84.575  68.471  1.00 29.44           O
HETATM14271  O   HOH  2007       5.580  87.961  42.458  1.00 31.30           O
HETATM14272  O   HOH  2008      -1.924  51.205  93.425  1.00 35.14           O
HETATM14273  O   HOH  2009      36.725  55.297  50.109  1.00 39.40           O
HETATM14274  O   HOH  2010      25.876  80.259  43.065  1.00 32.71           O
HETATM14275  O   HOH  2011      21.546  42.792  52.817  1.00 26.23           O
HETATM14276  O   HOH  2012      -1.587  68.798  82.700  1.00 36.21           O
HETATM14277  O   HOH  2013      10.780  47.138  42.970  1.00 30.48           O
HETATM14278  O   HOH  2014     -18.509  65.483  59.201  1.00 27.86           O
HETATM14279  O   HOH  2015       3.968  56.045  81.232  1.00 42.21           O
HETATM14280  O   HOH  2016       7.033  69.226  36.149  1.00 30.31           O
CONECT 146113246
CONECT 477013252
CONECT 807913258
CONECT1138813264
CONECT13241132421324313244
CONECT1324213241
CONECT1324313241
CONECT13244132411324513246
CONECT1324513244
CONECT13246 146113244
CONECT13247132481324913250
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CONECT13259132601326113262
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CONECT1326113259
CONECT13262132591326313264
CONECT1326313262
CONECT132641138813262
MASTER      318    0    8   88   47    0    0       614276    4   28  132
END
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HEADER    LYASE                                   30-JUN-00   1F8I
TITLE     CRYSTAL STRUCTURE OF ISOCITRATE
TITLE    2 LYASE:NITROPROPIONATE:GLYOXYLATE COMPLEX FROM MYCOBACTERIUM
TITLE    3 TUBERCULOSIS
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: ISOCITRATE LYASE;
COMPND   3 CHAIN: A, B, C, D;
COMPND   4 SYNONYM: ICL;
COMPND   5 EC: 4.1.3.1;
COMPND   6 ENGINEERED: YES;
COMPND   7 MUTATION: YES
SOURCE    MOL_ID: 1;
SOURCE   2 ORGANISM_SCIENTIFIC: MYCOBACTERIUM TUBERCULOSIS;
SOURCE   3 ORGANISM_COMMON: BACTERIA;
SOURCE   4 STRAIN: H37RV;
SOURCE   5 EXPRESSION_SYSTEM: ESCHERICHIA COLI;
SOURCE   6 EXPRESSION_SYSTEM_COMMON: BACTERIA;
SOURCE   7 EXPRESSION_SYSTEM_VECTOR_TYPE: PLASMID;
SOURCE   8 EXPRESSION_SYSTEM_PLASMID: PET30B
KEYWDS    ALPHA-BETA BARREL, SWAPPED HELICES, CLOSED CONFORMATION
EXPDTA    X-RAY DIFFRACTION
AUTHOR    V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,D.G.RUSSELL,
AUTHOR   2 W.R.JACOBS JR.,J.C.SACCHETTINI
REVDAT   1   30-DEC-00 1F8I    0
JRNL        AUTH   V.SHARMA,S.SHARMA,K.H.ZU BENTRUP,J.D.MCKINNEY,
JRNL        AUTH 2 D.G.RUSSELL,W.R.JACOBS JR.,J.C.SACCHETTINI
JRNL        TITL   STRUCTURE OF ISOCITRATE LYASE, A PERSISTENCE
JRNL        TITL 2 FACTOR OF MYCOBACTERIUM TUBERCULOSIS
JRNL        REF    NAT.STRUCT.BIOL.              V.   7   663 2000
JRNL        REFN   ASTM NSBIEW  US ISSN 1072-8368
REMARK   1
REMARK   2
REMARK   2 RESOLUTION. 2.25 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM      : CNS 1.0
REMARK   3   AUTHORS      : BRUNGER,ADAMS,CLORE,DELANO,GROS,GROSSE-
REMARK   3                : KUNSTLEVE,JIANG,KUSZEWSKI,NILGES, PANNU,
REMARK   3                : READ,RICE,SIMONSON,WARREN
REMARK   3
REMARK   3   REFINEMENT TARGET : ENGH & HUBER
REMARK   3
REMARK   3   DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) : 2.25
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) : 35.02
REMARK   3   DATA CUTOFF            (SIGMA(F)) : 0.000
REMARK   3   OUTLIER CUTOFF HIGH (RMS(ABS(F))) : NULL
REMARK   3   COMPLETENESS (WORKING+TEST)   (%) : 93.3
REMARK   3   NUMBER OF REFLECTIONS             : 71739
REMARK   3
REMARK   3
REMARK   3   FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE            (WORKING SET) : 0.166
REMARK   3   FREE R VALUE                     : 0.210
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 10.100
REMARK   3   FREE R VALUE TEST SET COUNT      : 7263
REMARK   3   ESTIMATED ERROR OF FREE R VALUE  : 0.002
REMARK   3
REMARK   3   FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED          : 6
REMARK   3   BIN RESOLUTION RANGE HIGH     (A) : 2.25
REMARK   3   BIN RESOLUTION RANGE LOW      (A) : 2.39
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) : 85.70
REMARK   3   REFLECTIONS IN BIN   (WORKING SET) : 9753
REMARK   3   BIN R VALUE          (WORKING SET) : 0.1920
REMARK   3   BIN FREE R VALUE                   : 0.2490
REMARK   3   BIN FREE R VALUE TEST SET SIZE  (%) : 10.00
REMARK   3   BIN FREE R VALUE TEST SET COUNT    : 1078
REMARK   3   ESTIMATED ERROR OF BIN FREE R VALUE : 0.008
REMARK   3
REMARK   3   NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   PROTEIN ATOMS            : 13232
REMARK   3   NUCLEIC ACID ATOMS       : 0
REMARK   3   HETEROGEN ATOMS          : 56
REMARK   3   SOLVENT ATOMS            : 1052
REMARK   3
REMARK   3   B VALUES.
REMARK   3   FROM WILSON PLOT          (A**2) : 19.80
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REMARK   3    MEAN B VALUE        (OVERALL, A**2) : 26.60
REMARK   3    OVERALL ANISOTROPIC B VALUE.
REMARK   3     B11 (A**2) : 3.39000
REMARK   3     B22 (A**2) : 2.02000
REMARK   3     B33 (A**2) : -5.41000
REMARK   3     B12 (A**2) : 0.00000
REMARK   3     B13 (A**2) : 0.00000
REMARK   3     B23 (A**2) : 0.00000
REMARK   3
REMARK   3    ESTIMATED COORDINATE ERROR.
REMARK   3     ESD FROM LUZZATI PLOT        (A) : 0.20
REMARK   3     ESD FROM SIGMAA              (A) : 0.150
REMARK   3     LOW RESOLUTION CUTOFF        (A) : 5.00
REMARK   3
REMARK   3    CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3     ESD FROM C-V LUZZATI PLOT    (A) : 0.27
REMARK   3     ESD FROM C-V SIGMAA          (A) : 0.24
REMARK   3
REMARK   3    RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3     BOND LENGTHS                 (A) : 0.005
REMARK   3     BOND ANGLES            (DEGREES) : 1.20
REMARK   3     DIHEDRAL ANGLES        (DEGREES) : 21.90
REMARK   3     IMPROPER ANGLES        (DEGREES) : 0.81
REMARK   3
REMARK   3    ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3    ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS     SIGMA
REMARK   3     MAIN-CHAIN BOND              (A**2) : 1.08  ; 1.500
REMARK   3     MAIN-CHAIN ANGLE             (A**2) : 1.62  ; 2.000
REMARK   3     SIDE-CHAIN BOND              (A**2) : 1.87  ; 2.000
REMARK   3     SIDE-CHAIN ANGLE             (A**2) : 2.60  ; 2.500
REMARK   3
REMARK   3
REMARK   3    BULK SOLVENT MODELING.
REMARK   3     METHOD USED : FLAT MODEL
REMARK   3     KSOL        : 0.36
REMARK   3     BSOL        : 42.37
REMARK   3
REMARK   3    NCS MODEL : CONSTR
REMARK   3
REMARK   3    NCS RESTRAINTS.                         RMS    SIGMA/WEIGHT
REMARK   3     GROUP  1  POSITIONAL            (A) : NULL  ; NULL
REMARK   3     GROUP  1  B-FACTOR           (A**2) : NULL  ; NULL
REMARK   3
REMARK   3    PARAMETER FILE  1  : PROTEIN_REP.PARAM
REMARK   3    PARAMETER FILE  2  : ION.PARAM
REMARK   3    PARAMETER FILE  3  : LIG.PAR
REMARK   3    PARAMETER FILE  4  : WATER_REP.PARAM
REMARK   3    TOPOLOGY FILE  1   : PROTEIN.TOP
REMARK   3    TOPOLOGY FILE  2   : ION.TOP
REMARK   3    TOPOLOGY FILE  3   : LIG.TOP
REMARK   3    TOPOLOGY FILE  4   : WATER.TOP
REMARK   3
REMARK   3    OTHER REFINEMENT REMARKS: NULL
REMARK   4
REMARK   4 1F8I COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 14-JUL-2000.
REMARK 100 THE RCSB ID CODE IS RCSB011373.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200    EXPERIMENT TYPE              : X-RAY DIFFRACTION
REMARK 200    DATE OF DATA COLLECTION      : 03-MAR-2000
REMARK 200    TEMPERATURE         (KELVIN) : 100.0
REMARK 200    PH                           : 8.00
REMARK 200    NUMBER OF CRYSTALS USED      : 1
REMARK 200
REMARK 200    SYNCHROTRON           (Y/N) : Y
REMARK 200    RADIATION SOURCE             : APS
REMARK 200    BEAMLINE                     : 14BMC
REMARK 200    X-RAY GENERATOR MODEL        : NULL
REMARK 200    MONOCHROMATIC OR LAUE  (M/L) : M
REMARK 200    WAVELENGTH OR RANGE     (A) : 1.0
REMARK 200    MONOCHROMATOR                : NULL
REMARK 200    OPTICS                       : NULL
REMARK 200
REMARK 200    DETECTOR TYPE                : CCD
REMARK 200    DETECTOR MANUFACTURER        : ADSC QUANTUM 4
REMARK 200    INTENSITY-INTEGRATION SOFTWARE : DENZO
REMARK 200    DATA SCALING SOFTWARE        : SCALEPACK
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REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS    : 72007
REMARK 200  RESOLUTION RANGE HIGH      (A) : 2.250
REMARK 200  RESOLUTION RANGE LOW       (A) : 99.000
REMARK 200  REJECTION CRITERIA  (SIGMA(I)) : 1.000
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE     (%) : 92.8
REMARK 200  DATA REDUNDANCY                : 4.120
REMARK 200  R MERGE                    (I) : 0.05000
REMARK 200  R SYM                      (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  : 18.6000
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 2.25
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE LOW  (A) : 2.33
REMARK 200  COMPLETENESS FOR SHELL     (%) : 79.8
REMARK 200  DATA REDUNDANCY IN SHELL       : 3.00
REMARK 200  R MERGE FOR SHELL          (I) : 0.12200
REMARK 200  R SYM FOR SHELL            (I) : NULL
REMARK 200  <I/SIGMA(I)> FOR SHELL         : NULL
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: NULL
REMARK 200 SOFTWARE USED: AMORE
REMARK 200 STARTING MODEL: NULL
REMARK 200
REMARK 200 REMARK: NULL
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS    (%): NULL
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: PEG4000, SODIUM ACETATE,
REMARK 280  TRIS.HCL, MAGNESIUM ACETATE, GLYOXYLATE, 3-NITROPROPIONATE
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: P 21 21 21
REMARK 290
REMARK 290      SYMOP   SYMMETRY
REMARK 290      NNNMMM  OPERATOR
REMARK 290      1555    X,Y,Z
REMARK 290      2555    1/2-X,-Y,1/2+Z
REMARK 290      3555    -X,1/2+Y,1/2-Z
REMARK 290      4555    1/2+X,1/2-Y,-Z
REMARK 290
REMARK 290      WHERE NNN -> OPERATOR NUMBER
REMARK 290            MMM -> TRANSLATION VECTOR
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290  SMTRY1   1  1.000000  0.000000  0.000000       0.00000
REMARK 290  SMTRY2   1  0.000000  1.000000  0.000000       0.00000
REMARK 290  SMTRY3   1  0.000000  0.000000  1.000000       0.00000
REMARK 290  SMTRY1   2 -1.000000  0.000000  0.000000      37.14550
REMARK 290  SMTRY2   2  0.000000 -1.000000  0.000000       0.00000
REMARK 290  SMTRY3   2  0.000000  0.000000  1.000000      83.48100
REMARK 290  SMTRY1   3 -1.000000  0.000000  0.000000       0.00000
REMARK 290  SMTRY2   3  0.000000  1.000000  0.000000      64.50900
REMARK 290  SMTRY3   3  0.000000  0.000000 -1.000000      83.48100
REMARK 290  SMTRY1   4  1.000000  0.000000  0.000000      37.14550
REMARK 290  SMTRY2   4  0.000000 -1.000000  0.000000      64.50900
REMARK 290  SMTRY3   4  0.000000  0.000000 -1.000000       0.00000
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1
REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
REMARK 300 WHICH CONSISTS OF 4 CHAIN(S). SEE REMARK 350 FOR
REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
REMARK 350
REMARK 350 GENERATING THE BIOMOLECULE
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW.  BOTH NON-CRYSTALLOGRAPHIC AND
REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
REMARK 350
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REMARK 350 BIOMOLECULE: 1
REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B, C, D
REMARK 350   BIOMT1   1  1.000000  0.000000  0.000000        0.00000
REMARK 350   BIOMT2   1  0.000000  1.000000  0.000000        0.00000
REMARK 350   BIOMT3   1  0.000000  0.000000  1.000000        0.00000
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
REMARK 465
REMARK 465   M RES C SSSEQI
REMARK 465     MET A      0
REMARK 465     HIS A    428
REMARK 465     MET B      0
REMARK 465     HIS B    428
REMARK 465     MET C      0
REMARK 465     HIS C    428
REMARK 465     MET D      0
REMARK 465     HIS D    428
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500   M RES CSSEQI ATM1    RES CSSEQI ATM2   DEVIATION
REMARK 500     ALA A    1  CA     ALA A    1  N       0.034
REMARK 500     MET A  284  CE     MET A  284  SD     -0.044
REMARK 500     MET A  370  CE     MET A  370  SD      0.046
REMARK 500     VAL A  397  CG2    VAL A  397  CB     -0.035
REMARK 500     ALA B    1  CA     ALA B    1  N       0.034
REMARK 500     PRO B  118  CD     PRO B  118  CG      0.034
REMARK 500     MET B  309  CE     MET B  309  SD     -0.040
REMARK 500     VAL B  397  CG2    VAL B  397  CB     -0.034
REMARK 500     ALA C    1  CA     ALA C    1  N       0.033
REMARK 500     ALA D    1  CA     ALA D    1  N       0.035
REMARK 500     MET D   76  CE     MET D   76  SD     -0.033
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500   M RES CSSEQI ATM1    ATM2    ATM3
REMARK 500     THR A   19  N   -  CA  -  C     ANGL. DEV. =   7.7 DEGREES
REMARK 500     GLN A   39  N   -  CA  -  C     ANGL. DEV. =   8.5 DEGREES
REMARK 500     PRO A  107  N   -  CA  -  C     ANGL. DEV. =-10.1 DEGREES
REMARK 500     ALA A  114  N   -  CA  -  C     ANGL. DEV. =   8.6 DEGREES
REMARK 500     VAL A  151  N   -  CA  -  C     ANGL. DEV. =  -7.1 DEGREES
REMARK 500     SER A  191  N   -  CA  -  C     ANGL. DEV. =  -7.5 DEGREES
REMARK 500     CYS A  314  N   -  CA  -  C     ANGL. DEV. =  -8.4 DEGREES
REMARK 500     SER A  315  N   -  CA  -  C     ANGL. DEV. =  10.1 DEGREES
REMARK 500     ASN A  319  N   -  CA  -  C     ANGL. DEV. =-12.2 DEGREES
REMARK 500     TRP A  320  N   -  CA  -  C     ANGL. DEV. =   9.0 DEGREES
REMARK 500     GLY A  398  N   -  CA  -  C     ANGL. DEV. =   8.2 DEGREES
REMARK 500     ALA A  417  N   -  CA  -  C     ANGL. DEV. =   8.6 DEGREES
REMARK 500     LEU B  101  N   -  CA  -  C     ANGL. DEV. =   8.0 DEGREES
REMARK 500     PRO B  107  N   -  CA  -  C     ANGL. DEV. =  -9.6 DEGREES
REMARK 500     ALA B  114  N   -  CA  -  C     ANGL. DEV. =   7.2 DEGREES
REMARK 500     CYS B  314  N   -  CA  -  C     ANGL. DEV. =  -8.3 DEGREES
REMARK 500     SER B  315  N   -  CA  -  C     ANGL. DEV. =  10.2 DEGREES
REMARK 500     ASN B  319  N   -  CA  -  C     ANGL. DEV. =-11.6 DEGREES
REMARK 500     TRP B  320  N   -  CA  -  C     ANGL. DEV. =   8.4 DEGREES
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REMARK 500     MET B 370     N   -  CA  -   C    ANGL. DEV. =   7.3 DEGREES
REMARK 500     LYS B 392     N   -  CA  -   C    ANGL. DEV. =  -8.0 DEGREES
REMARK 500     GLY B 398     N   -  CA  -   C    ANGL. DEV. =   7.8 DEGREES
REMARK 500     ALA B 417     N   -  CA  -   C    ANGL. DEV. =  10.3 DEGREES
REMARK 500     GLY B 425     N   -  CA  -   C    ANGL. DEV. =   7.3 DEGREES
REMARK 500     LEU C  90     CA  -  CB  -  CG    ANGL. DEV. =   7.9 DEGREES
REMARK 500     GLY C  97     N   -  CA  -   C    ANGL. DEV. =   7.3 DEGREES
REMARK 500     LEU C 101     N   -  CA  -   C    ANGL. DEV. =   7.3 DEGREES
REMARK 500     PRO C 107     N   -  CA  -   C    ANGL. DEV. =  -8.5 DEGREES
REMARK 500     VAL C 151     N   -  CA  -   C    ANGL. DEV. =  -7.4 DEGREES
REMARK 500     LEU C 185     N   -  CA  -   C    ANGL. DEV. =  -7.4 DEGREES
REMARK 500     CYS C 314     N   -  CA  -   C    ANGL. DEV. =  -7.8 DEGREES
REMARK 500     SER C 315     N   -  CA  -   C    ANGL. DEV. =  10.4 DEGREES
REMARK 500     ASN C 319     N   -  CA  -   C    ANGL. DEV. =  -9.5 DEGREES
REMARK 500     TRP C 320     N   -  CA  -   C    ANGL. DEV. =   8.7 DEGREES
REMARK 500     ILE C 346     N   -  CA  -   C    ANGL. DEV. =  -7.5 DEGREES
REMARK 500     LYS C 392     N   -  CA  -   C    ANGL. DEV. =  -7.4 DEGREES
REMARK 500     GLY C 398     N   -  CA  -   C    ANGL. DEV. =   8.5 DEGREES
REMARK 500     ALA C 417     N   -  CA  -   C    ANGL. DEV. =   9.0 DEGREES
REMARK 500     LEU D 101     N   -  CA  -   C    ANGL. DEV. =   7.3 DEGREES
REMARK 500     PRO D 107     N   -  CA  -   C    ANGL. DEV. =  -9.5 DEGREES
REMARK 500     ALA D 114     N   -  CA  -   C    ANGL. DEV. =   7.2 DEGREES
REMARK 500     CYS D 314     N   -  CA  -   C    ANGL. DEV. =  -7.5 DEGREES
REMARK 500     SER D 315     N   -  CA  -   C    ANGL. DEV. =   9.3 DEGREES
REMARK 500     ASN D 319     N   -  CA  -   C    ANGL. DEV. =  -9.0 DEGREES
REMARK 500     TRP D 320     N   -  CA  -   C    ANGL. DEV. =   8.7 DEGREES
REMARK 500     THR D 347     N   -  CA  -   C    ANGL. DEV. =   7.9 DEGREES
REMARK 500     GLY D 398     N   -  CA  -   C    ANGL. DEV. =   9.2 DEGREES
REMARK 500     ALA D 417     N   -  CA  -   C    ANGL. DEV. =   9.8 DEGREES
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: TORSION ANGLES
REMARK 500
REMARK 500   .
REMARK 500 TORSION ANGLES OUTSIDE THE EXPECTED RAMACHANDRAN REGIONS:
REMARK 500 (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN IDENTIFIER;
REMARK 500 SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT:(10X,I3,1X,A3,1X,A1,I4,A1,4X,F7.2,3X,F7.2)
REMARK 500
REMARK 500   M RES CSSEQI        PSI       PHI
REMARK 500     GLN C 369      -119.67     37.30
REMARK 900
REMARK 900 RELATED ENTRIES
REMARK 900 RELATED ID: 1F8M    RELATED DB: PDB
REMARK 900 STRUCTURE OF 3-BROMOPYRUVATE MODIFIED ISOCITRATE LYASE
REMARK 999
REMARK 999 SEQUENCE
REMARK 999 AN ALANINE WAS INSERTED AT THE N-TERMINUS
REMARK 999 AFTER THE FIRST METHIONINE RESIDUE, MASVV...
REMARK 999 MET 0 WAS NOT OBSERVED DUE TO POOR DENSITY OR
REMARK 999 PERHAPS IT WAS CLEAVED OFF THE RECOMBINANT
REMARK 999 PROTEIN DURING EXPRESSION. THEREFORE, THE
REMARK 999 FIRST RESIDUE IN THIS ENTRY IS ALA 1.
DBREF  1F8I A    0    428  GB      7436639  G70828            1     428
DBREF  1F8I B    0    428  GB      7436639  G70828            1     428
DBREF  1F8I C    0    428  GB      7436639  G70828            1     428
DBREF  1F8I D    0    428  GB      7436639  G70828            1     428
SEQADV 1F8I ALA A    1  GB    7436639                  INSERTION
SEQADV 1F8I SER A  191  GB    7436639     CYS   191 ENGINEERED
SEQADV 1F8I ALA B    1  GB    7436639                  INSERTION
SEQADV 1F8I SER B  191  GB    7436639     CYS   191 ENGINEERED
SEQADV 1F8I ALA C    1  GB    7436639                  INSERTION
SEQADV 1F8I SER C  191  GB    7436639     CYS   191 ENGINEERED
SEQADV 1F8I ALA D    1  GB    7436639                  INSERTION
SEQADV 1F8I SER D  191  GB    7436639     CYS   191 ENGINEERED
SEQRES    1 A   429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES    2 A   429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES    3 A   429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES    4 A   429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES    5 A   429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES    6 A   429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES    7 A   429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES    8 A   429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES    9 A   429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES   10 A   429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES   11 A   429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES   12 A   429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES   13 A   429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES   14 A   429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
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SEQRES  15 A  429  GLU ASP GLN LEU ALA SER GLU LYS LYS SER GLY HIS LEU
SEQRES  16 A  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 A  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 A  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 A  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 A  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 A  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 A  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 A  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 A  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 A  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 A  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 A  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 A  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 A  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 A  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 A  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 A  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 A  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES   1 B  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES   2 B  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES   3 B  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES   4 B  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES   5 B  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES   6 B  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES   7 B  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES   8 B  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES   9 B  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES  10 B  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES  11 B  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES  12 B  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES  13 B  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES  14 B  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES  15 B  429  GLU ASP GLN LEU ALA SER GLU LYS LYS SER GLY HIS LEU
SEQRES  16 B  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 B  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 B  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 B  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 B  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 B  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 B  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 B  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 B  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 B  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 B  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 B  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 B  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 B  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 B  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 B  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 B  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 B  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES   1 C  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES   2 C  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES   3 C  429  VAL THR ARG THR TYR SER ALA GLU ASP VAL VAL ALA LEU
SEQRES   4 C  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES   5 C  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES   6 C  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES   7 C  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES   8 C  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES   9 C  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES  10 C  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES  11 C  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES  12 C  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES  13 C  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES  14 C  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES  15 C  429  GLU ASP GLN LEU ALA SER GLU LYS LYS SER GLY HIS LEU
SEQRES  16 C  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 C  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 C  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 C  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 C  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 C  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 C  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 C  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 C  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 C  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 C  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 C  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 C  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
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SEQRES  29 C  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 C  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 C  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 C  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 C  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
SEQRES   1 D  429  MET ALA SER VAL VAL GLY THR PRO LYS SER ALA GLU GLN
SEQRES   2 D  429  ILE GLN GLN GLU TRP ASP THR ASN PRO ARG TRP LYS ASP
SEQRES   3 D  429  VAL THR ARG THR TYR SER ALA ASP VAL VAL ALA LEU
SEQRES   4 D  429  GLN GLY SER VAL VAL GLU GLU HIS THR LEU ALA ARG ARG
SEQRES   5 D  429  GLY ALA GLU VAL LEU TRP GLU GLN LEU HIS ASP LEU GLU
SEQRES   6 D  429  TRP VAL ASN ALA LEU GLY ALA LEU THR GLY ASN MET ALA
SEQRES   7 D  429  VAL GLN GLN VAL ARG ALA GLY LEU LYS ALA ILE TYR LEU
SEQRES   8 D  429  SER GLY TRP GLN VAL ALA GLY ASP ALA ASN LEU SER GLY
SEQRES   9 D  429  HIS THR TYR PRO ASP GLN SER LEU TYR PRO ALA ASN SER
SEQRES  10 D  429  VAL PRO GLN VAL VAL ARG ARG ILE ASN ASN ALA LEU GLN
SEQRES  11 D  429  ARG ALA ASP GLN ILE ALA LYS ILE GLU GLY ASP THR SER
SEQRES  12 D  429  VAL GLU ASN TRP LEU ALA PRO ILE VAL ALA ASP GLY GLU
SEQRES  13 D  429  ALA GLY PHE GLY GLY ALA LEU ASN VAL TYR GLU LEU GLN
SEQRES  14 D  429  LYS ALA LEU ILE ALA ALA GLY VAL ALA GLY SER HIS TRP
SEQRES  15 D  429  GLU ASP GLN LEU ALA SER GLU LYS LYS SER GLY HIS LEU
SEQRES  16 D  429  GLY GLY LYS VAL LEU ILE PRO THR GLN GLN HIS ILE ARG
SEQRES  17 D  429  THR LEU THR SER ALA ARG LEU ALA ALA ASP VAL ALA ASP
SEQRES  18 D  429  VAL PRO THR VAL VAL ILE ALA ARG THR ASP ALA GLU ALA
SEQRES  19 D  429  ALA THR LEU ILE THR SER ASP VAL ASP GLU ARG ASP GLN
SEQRES  20 D  429  PRO PHE ILE THR GLY GLU ARG THR ARG GLU GLY PHE TYR
SEQRES  21 D  429  ARG THR LYS ASN GLY ILE GLU PRO CYS ILE ALA ARG ALA
SEQRES  22 D  429  LYS ALA TYR ALA PRO PHE ALA ASP LEU ILE TRP MET GLU
SEQRES  23 D  429  THR GLY THR PRO ASP LEU GLU ALA ALA ARG GLN PHE SER
SEQRES  24 D  429  GLU ALA VAL LYS ALA GLU TYR PRO ASP GLN MET LEU ALA
SEQRES  25 D  429  TYR ASN CYS SER PRO SER PHE ASN TRP LYS LYS HIS LEU
SEQRES  26 D  429  ASP ASP ALA THR ILE ALA LYS PHE GLN LYS GLU LEU ALA
SEQRES  27 D  429  ALA MET GLY PHE LYS PHE GLN PHE ILE THR LEU ALA GLY
SEQRES  28 D  429  PHE HIS ALA LEU ASN TYR SER MET PHE ASP LEU ALA TYR
SEQRES  29 D  429  GLY TYR ALA GLN ASN GLN MET SER ALA TYR VAL GLU LEU
SEQRES  30 D  429  GLN GLU ARG GLU PHE ALA ALA GLU GLU ARG GLY TYR THR
SEQRES  31 D  429  ALA THR LYS HIS GLN ARG GLU VAL GLY ALA GLY TYR PHE
SEQRES  32 D  429  ASP ARG ILE ALA THR THR VAL ASP PRO ASN SER SER THR
SEQRES  33 D  429  THR ALA LEU THR GLY SER THR GLU GLU GLY GLN PHE HIS
HET     MG   A 451       1
HET     MG   B 452       1
HET     MG   C 453       1
HET     MG   D 454       1
HET    GLV     461       5
HET    GLV     462       5
HET    GLV     463       5
HET    GLV     464       5
HET    SIN     471       8
HET    SIN     472       8
HET    SIN     473       8
HET    SIN     474       8
HETNAM      MG MAGNESIUM ION
HETNAM     GLV GLYOXYLIC ACID
HETNAM     SIN SUCCINIC ACID
HETSYN     GLV GLYOXALATE
FORMUL   5   MG    4(MG1 2+)
FORMUL   9   GLV   4(C2 H2 O3)
FORMUL  13   SIN   4(C4 H6 O4)
FORMUL  17   HOH  *1052(H2 O1)
HELIX    1   1 SER A    9  ASN A   20  1                                  12
HELIX    2   2 PRO A   21  LYS A   24  5                                   4
HELIX    3   3 SER A   31  LEU A   38  1                                   8
HELIX    4   4 HIS A   46  LEU A   63  1                                  18
HELIX    5   5 THR A   73  ALA A   83  1                                  11
HELIX    6   6 SER A   91  ALA A   99  1                                   9
HELIX    7   7 ASN A  115  GLY A  139  1                                  25
HELIX    8   8 GLY A  160  ALA A  174  1                                  15
HELIX    9   9 LEU A  185  LYS A  189  5                                   5
HELIX   10  10 PRO A  201  ALA A  219  1                                  19
HELIX   11  11 ASP A  245  PRO A  247  5                                   3
HELIX   12  12 GLY A  264  ALA A  276  1                                  13
HELIX   13  13 PRO A  277  ALA A  279  5                                   3
HELIX   14  14 ASP A  290  TYR A  305  1                                  16
HELIX   15  15 ASN A  319  LEU A  324  1                                   6
HELIX   16  16 ASP A  325  MET A  339  1                                  15
HELIX   17  17 LEU A  348  GLN A  369  1                                  22
HELIX   18  18 GLN A  369  GLU A  384  1                                  16
HELIX   19  19 GLU A  385  GLY A  387  5                                   3
HELIX   20  20 LYS A  392  VAL A  397  1                                   6
HELIX   21  21 GLY A  398  ASP A  410  1                                  13
HELIX   22  22 SER A  421  PHE A  427  1                                   7
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HELIX    23    23 SER B      9  ASN B     20  1                                                    12
HELIX    24    24 PRO B     21  LYS B     24  5                                                     4
HELIX    25    25 SER B     31  LEU B     38  1                                                     8
HELIX    26    26 HIS B     46  LEU B     63  1                                                    18
HELIX    27    27 THR B     73  ALA B     83  1                                                    11
HELIX    28    28 SER B     91  ALA B     99  1                                                     9
HELIX    29    29 ASN B    115  GLY B    139  1                                                    25
HELIX    30    30 GLY B    160  ALA B    174  1                                                    15
HELIX    31    31 LEU B    185  LYS B    189  5                                                     5
HELIX    32    32 PRO B    201  ALA B    219  1                                                    19
HELIX    33    33 ASP B    245  PRO B    247  5                                                     3
HELIX    34    34 GLY B    264  ALA B    276  1                                                    13
HELIX    35    35 PRO B    277  ALA B    279  5                                                     3
HELIX    36    36 ASP B    290  ALA B    303  1                                                    14
HELIX    37    37 ASN B    319  LEU B    324  1                                                     6
HELIX    38    38 ASP B    325  MET B    339  1                                                    15
HELIX    39    39 LEU B    348  GLN B    369  1                                                    22
HELIX    40    40 GLN B    369  GLU B    384  1                                                    16
HELIX    41    41 GLU B    385  GLY B    387  5                                                     3
HELIX    42    42 LYS B    392  VAL B    397  1                                                     6
HELIX    43    43 GLY B    398  ASP B    410  1                                                    13
HELIX    44    44 SER B    421  PHE B    427  1                                                     7
HELIX    45    45 SER C      9  ASN C     20  1                                                    12
HELIX    46    46 PRO C     21  LYS C     24  5                                                     4
HELIX    47    47 SER C     31  GLN C     39  1                                                     9
HELIX    48    48 HIS C     46  LEU C     63  1                                                    18
HELIX    49    49 THR C     73  ALA C     83  1                                                    11
HELIX    50    50 SER C     91  ALA C     99  1                                                     9
HELIX    51    51 ASN C    115  GLU C    138  1                                                    24
HELIX    52    52 GLY C    160  ALA C    174  1                                                    15
HELIX    53    53 LEU C    185  LYS C    189  5                                                     5
HELIX    54    54 PRO C    201  ALA C    219  1                                                    19
HELIX    55    55 ASP C    245  PRO C    247  5                                                     3
HELIX    56    56 GLY C    264  ALA C    276  1                                                    13
HELIX    57    57 PRO C    277  ALA C    279  5                                                     3
HELIX    58    58 ASP C    290  TYR C    305  1                                                    16
HELIX    59    59 ASN C    319  LEU C    324  1                                                     6
HELIX    60    60 ASP C    325  MET C    339  1                                                    15
HELIX    61    61 LEU C    348  GLN C    369  1                                                    22
HELIX    62    62 GLN C    369  GLU C    384  1                                                    16
HELIX    63    63 GLU C    385  GLY C    387  5                                                     3
HELIX    64    64 LYS C    392  VAL C    397  1                                                     6
HELIX    65    65 GLY C    398  ASP C    410  1                                                    13
HELIX    66    66 SER C    421  PHE C    427  1                                                     7
HELIX    67    67 SER D      9  ASN D     20  1                                                    12
HELIX    68    68 PRO D     21  LYS D     24  5                                                     4
HELIX    69    69 SER D     31  GLN D     39  1                                                     9
HELIX    70    70 HIS D     46  LEU D     63  1                                                    18
HELIX    71    71 THR D     73  ALA D     83  1                                                    11
HELIX    72    72 SER D     91  ALA D     99  1                                                     9
HELIX    73    73 ASN D    115  GLY D    139  1                                                    25
HELIX    74    74 GLY D    160  GLY D    175  1                                                    16
HELIX    75    75 LEU D    185  LYS D    189  5                                                     5
HELIX    76    76 PRO D    201  ALA D    219  1                                                    19
HELIX    77    77 ASP D    245  PRO D    247  5                                                     3
HELIX    78    78 GLY D    264  ALA D    276  1                                                    13
HELIX    79    79 PRO D    277  ALA D    279  5                                                     3
HELIX    80    80 ASP D    290  ALA D    303  1                                                    14
HELIX    81    81 ASN D    319  LEU D    324  1                                                     6
HELIX    82    82 ASP D    325  MET D    339  1                                                    15
HELIX    83    83 LEU D    348  GLN D    369  1                                                    22
HELIX    84    84 GLN D    369  GLU D    384  1                                                    16
HELIX    85    85 GLU D    385  GLY D    387  5                                                     3
HELIX    86    86 LYS D    392  VAL D    397  1                                                     6
HELIX    87    87 GLY D    398  ASP D    410  1                                                    13
HELIX    88    88 SER D    421  PHE D    427  1                                                     7
SHEET     1   A 8 VAL A  66  LEU A  69  0
SHEET     2   A 8 PHE A 341  ILE A 346  1  O  LYS A 342   N  VAL A  66
SHEET     3   A 8 MET A 309  ASN A 313  1  O  LEU A 310   N  PHE A 343
SHEET     4   A 8 LEU A 281  MET A 284  1  O  ILE A 282   N  ALA A 311
SHEET     5   A 8 VAL A 224  THR A 229  1  O  VAL A 225   N  LEU A 281
SHEET     6   A 8 GLY A 178  GLU A 182  1  O  SER A 179   N  ILE A 226
SHEET     7   A 8 ILE A 150  ASP A 153  1  O  ILE A 150   N  GLY A 178
SHEET     8   A 8 ILE A  88  LEU A  90  1  O  ILE A  88   N  VAL A 151
SHEET     1   B 4 VAL A 198  LEU A 199  0
SHEET     2   B 4 LEU A 236  ILE A 237  1  O  LEU A 236   N  LEU A 199
SHEET     3   B 4 TYR A 259  THR A 261 -1  N  TYR A 259   O  ILE A 237
SHEET     4   B 4 ILE A 249  ARG A 253 -1  N  THR A 250   O  ARG A 260
SHEET     1   C 8 VAL B  66  LEU B  69  0
SHEET     2   C 8 PHE B 341  ILE B 346  1  O  LYS B 342   N  VAL B  66
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SHEET    3   C 8 MET B 309  ASN B 313  1  O  LEU B 310   N  PHE B 343
SHEET    4   C 8 LEU B 281  MET B 284  1  O  ILE B 282   N  ALA B 311
SHEET    5   C 8 VAL B 224  THR B 229  1  O  VAL B 225   N  LEU B 281
SHEET    6   C 8 GLY B 178  GLU B 182  1  O  SER B 179   N  ILE B 226
SHEET    7   C 8 ILE B 150  ASP B 153  1  O  ILE B 150   N  GLY B 178
SHEET    8   C 8 ILE B  88  LEU B  90  1  O  ILE B  88   N  VAL B 151
SHEET    1   D 4 VAL B 198  LEU B 199  0
SHEET    2   D 4 LEU B 236  ILE B 237  1  O  LEU B 236   N  LEU B 199
SHEET    3   D 4 TYR B 259  THR B 261 -1  N  TYR B 259   O  ILE B 237
SHEET    4   D 4 ILE B 249  ARG B 253 -1  N  THR B 250   O  ARG B 260
SHEET    1   E 8 VAL C  66  LEU C  69  0
SHEET    2   E 8 PHE C 341  ILE C 346  1  O  LYS C 342   N  VAL C  66
SHEET    3   E 8 MET C 309  ASN C 313  1  O  LEU C 310   N  LYS C 342
SHEET    4   E 8 LEU C 281  MET C 284  1  O  ILE C 282   N  ALA C 311
SHEET    5   E 8 VAL C 224  THR C 229  1  O  VAL C 225   N  LEU C 281
SHEET    6   E 8 GLY C 178  GLU C 182  1  O  SER C 179   N  ILE C 226
SHEET    7   E 8 ILE C 150  ASP C 153  1  O  ILE C 150   N  GLY C 178
SHEET    8   E 8 ILE C  88  LEU C  90  1  O  ILE C  88   N  VAL C 151
SHEET    1   F 4 VAL C 198  LEU C 199  0
SHEET    2   F 4 LEU C 236  ILE C 237  1  O  LEU C 236   N  LEU C 199
SHEET    3   F 4 TYR C 259  THR C 261 -1  N  TYR C 259   O  ILE C 237
SHEET    4   F 4 ILE C 249  ARG C 253 -1  N  THR C 250   O  ARG C 260
SHEET    1   G 8 VAL D  66  LEU D  69  0
SHEET    2   G 8 PHE D 341  ILE D 346  1  O  LYS D 342   N  VAL D  66
SHEET    3   G 8 MET D 309  ASN D 313  1  O  LEU D 310   N  PHE D 343
SHEET    4   G 8 LEU D 281  MET D 284  1  O  ILE D 282   N  ALA D 311
SHEET    5   G 8 VAL D 224  THR D 229  1  O  VAL D 225   N  LEU D 281
SHEET    6   G 8 GLY D 178  GLU D 182  1  O  SER D 179   N  ILE D 226
SHEET    7   G 8 ILE D 150  ASP D 153  1  O  ILE D 150   N  GLY D 178
SHEET    8   G 8 ILE D  88  LEU D  90  1  O  ILE D  88   N  VAL D 151
SHEET    1   H 4 VAL D 198  LEU D 199  0
SHEET    2   H 4 LEU D 236  ILE D 237  1  O  LEU D 236   N  LEU D 199
SHEET    3   H 4 TYR D 259  THR D 261 -1  N  TYR D 259   O  ILE D 237
SHEET    4   H 4 ILE D 249  ARG D 253 -1  N  THR D 250   O  ARG D 260
CRYST1   74.291  129.018  166.962  90.00   90.00   90.00 P 21 21 21      16
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      0.013461  0.000000  0.000000        0.00000
SCALE2      0.000000  0.007751  0.000000        0.00000
SCALE3      0.000000  0.000000  0.005989        0.00000
ATOM      1  N   ALA A   1      35.286  84.967  56.655  1.00 49.70           N
ATOM      2  CA  ALA A   1      36.771  85.033  56.788  1.00 49.35           C
ATOM      3  C   ALA A   1      37.262  84.130  57.915  1.00 48.56           C
ATOM      4  O   ALA A   1      37.363  84.559  59.066  1.00 48.47           O
ATOM      5  CB  ALA A   1      37.204  86.472  57.049  1.00 50.12           C
ATOM      6  N   SER A   2      37.571  82.881  57.579  1.00 47.64           N
ATOM      7  CA  SER A   2      38.054  81.917  58.563  1.00 46.14           C
ATOM      8  C   SER A   2      38.786  80.787  57.842  1.00 44.68           C
ATOM      9  O   SER A   2      38.552  80.551  56.657  1.00 44.64           O
ATOM     10  CB  SER A   2      36.873  81.352  59.368  1.00 47.37           C
ATOM     11  OG  SER A   2      37.302  80.500  60.421  1.00 47.70           O
ATOM     12  N   VAL A   3      39.676  80.100  58.555  1.00 42.42           N
ATOM     13  CA  VAL A   3      40.429  78.991  57.971  1.00 41.23           C
ATOM     14  C   VAL A   3      39.823  77.655  58.387  1.00 39.53           C
ATOM     15  O   VAL A   3      40.300  76.593  57.988  1.00 38.52           O
ATOM     16  CB  VAL A   3      41.910  79.003  58.417  1.00 41.58           C
ATOM     17  CG1 VAL A   3      42.555  80.322  58.034  1.00 41.65           C
ATOM     18  CG2 VAL A   3      42.008  78.769  59.918  1.00 40.45           C
ATOM     19  N   VAL A   4      38.776  77.720  59.204  1.00 38.02           N
ATOM     20  CA  VAL A   4      38.100  76.518  59.673  1.00 34.70           C
ATOM     21  C   VAL A   4      37.411  75.830  58.500  1.00 34.09           C
ATOM     22  O   VAL A   4      36.604  76.440  57.798  1.00 33.87           O
ATOM     23  CB  VAL A   4      37.043  76.858  60.742  1.00 34.26           C
ATOM     24  CG1 VAL A   4      36.421  75.575  61.289  1.00 32.04           C
ATOM     25  CG2 VAL A   4      37.680  77.676  61.856  1.00 32.83           C
ATOM     26  N   GLY A   5      37.744  74.562  58.287  1.00 33.92           N
ATOM     27  CA  GLY A   5      37.145  73.813  57.200  1.00 33.28           C
ATOM     28  C   GLY A   5      37.802  74.056  55.854  1.00 33.60           C
ATOM     29  O   GLY A   5      37.278  73.636  54.821  1.00 33.52           O
ATOM     30  N   THR A   6      38.942  74.739  55.849  1.00 32.02           N
ATOM     31  CA  THR A   6      39.636  75.003  54.596  1.00 31.96           C
ATOM     32  C   THR A   6      39.973  73.673  53.932  1.00 31.14           C
ATOM     33  O   THR A   6      40.607  72.811  54.540  1.00 30.09           O
ATOM     34  CB  THR A   6      40.939  75.777  54.827  1.00 33.04           C
ATOM     35  OG1 THR A   6      40.651  76.990  55.532  1.00 35.87           O
ATOM     36  CG2 THR A   6      41.596  76.112  53.494  1.00 32.74           C
ATOM     37  N   PRO A   7      39.549  73.487  52.672  1.00 30.52           N
ATOM     38  CA  PRO A   7      39.836  72.231  51.978  1.00 31.04           C
ATOM     39  C   PRO A   7      41.316  71.985  51.684  1.00 31.19           C
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| ATOM | 40 | O | PRO A | 7 | 42.094 | 72.926 | 51.514 | 1.00 31.25 | O |
| ATOM | 41 | CB | PRO A | 7 | 38.981 | 72.333 | 50.711 | 1.00 30.88 | C |
| ATOM | 42 | CG | PRO A | 7 | 38.871 | 73.797 | 50.480 | 1.00 29.94 | C |
| ATOM | 43 | CD | PRO A | 7 | 38.706 | 74.373 | 51.849 | 1.00 30.12 | C |
| ATOM | 44 | N | LYS A | 8 | 41.696 | 70.710 | 51.654 | 1.00 30.82 | N |
| ATOM | 45 | CA | LYS A | 8 | 43.070 | 70.310 | 51.356 | 1.00 30.44 | C |
| ATOM | 46 | C | LYS A | 8 | 43.389 | 70.677 | 49.915 | 1.00 30.21 | C |
| ATOM | 47 | O | LYS A | 8 | 42.486 | 70.930 | 49.119 | 1.00 31.56 | O |
| ATOM | 48 | CB | LYS A | 8 | 43.229 | 68.798 | 51.510 | 1.00 30.29 | C |
| ATOM | 49 | CG | LYS A | 8 | 42.920 | 68.271 | 52.896 | 1.00 32.90 | C |
| ATOM | 50 | CD | LYS A | 8 | 43.130 | 66.767 | 52.951 | 1.00 32.76 | C |
| ATOM | 51 | CE | LYS A | 8 | 42.892 | 66.225 | 54.348 | 1.00 33.03 | C |
| ATOM | 52 | NZ | LYS A | 8 | 43.003 | 64.740 | 54.385 | 1.00 29.72 | N |
| ATOM | 53 | N | SER A | 9 | 44.670 | 70.702 | 49.572 | 1.00 30.60 | N |
| ATOM | 54 | CA | SER A | 9 | 45.055 | 71.017 | 48.205 | 1.00 31.46 | C |
| ATOM | 55 | C | SER A | 9 | 45.051 | 69.702 | 47.441 | 1.00 31.04 | C |
| ATOM | 56 | O | SER A | 9 | 45.081 | 68.628 | 48.046 | 1.00 31.55 | O |
| ATOM | 57 | CB | SER A | 9 | 46.457 | 71.633 | 48.159 | 1.00 32.00 | C |
| ATOM | 58 | OG | SER A | 9 | 47.449 | 70.663 | 48.449 | 1.00 34.75 | O |
| ATOM | 59 | N | ALA A | 10 | 44.997 | 69.784 | 46.118 | 1.00 32.03 | N |
| ATOM | 60 | CA | ALA A | 10 | 45.011 | 68.589 | 45.292 | 1.00 31.45 | C |
| ATOM | 61 | C | ALA A | 10 | 46.293 | 67.809 | 45.604 | 1.00 32.33 | C |
| ATOM | 62 | O | ALA A | 10 | 46.277 | 66.580 | 45.714 | 1.00 31.50 | O |
| ATOM | 63 | CB | ALA A | 10 | 44.962 | 68.977 | 43.814 | 1.00 29.96 | C |
| ATOM | 64 | N | GLU A | 11 | 47.400 | 68.533 | 45.764 | 1.00 33.43 | N |
| ATOM | 65 | CA | GLU A | 11 | 48.689 | 67.910 | 46.061 | 1.00 34.46 | C |
| ATOM | 66 | C | GLU A | 11 | 48.634 | 67.067 | 47.332 | 1.00 32.67 | C |
| ATOM | 67 | O | GLU A | 11 | 49.115 | 65.933 | 47.357 | 1.00 31.71 | O |
| ATOM | 68 | CB | GLU A | 11 | 49.782 | 68.976 | 46.208 | 1.00 38.87 | C |
| ATOM | 69 | CG | GLU A | 11 | 50.109 | 69.762 | 44.933 | 1.00 42.88 | C |
| ATOM | 70 | CD | GLU A | 11 | 48.999 | 70.709 | 44.505 | 1.00 45.99 | C |
| ATOM | 71 | OE1 | GLU A | 11 | 48.491 | 71.458 | 45.369 | 1.00 48.56 | O |
| ATOM | 72 | OE2 | GLU A | 11 | 48.645 | 70.715 | 43.303 | 1.00 48.01 | O |
| ATOM | 73 | N | GLN A | 12 | 48.051 | 67.624 | 48.390 | 1.00 32.75 | N |
| ATOM | 74 | CA | GLN A | 12 | 47.930 | 66.909 | 49.664 | 1.00 32.92 | C |
| ATOM | 75 | C | GLN A | 12 | 47.106 | 65.635 | 49.485 | 1.00 32.67 | C |
| ATOM | 76 | O | GLN A | 12 | 47.446 | 64.582 | 50.022 | 1.00 31.80 | O |
| ATOM | 77 | CB | GLN A | 12 | 47.246 | 67.787 | 50.712 | 1.00 33.78 | C |
| ATOM | 78 | CG | GLN A | 12 | 47.921 | 69.115 | 50.965 | 1.00 38.15 | C |
| ATOM | 79 | CD | GLN A | 12 | 47.208 | 69.933 | 52.030 | 1.00 39.12 | C |
| ATOM | 80 | OE1 | GLN A | 12 | 47.080 | 69.503 | 53.176 | 1.00 40.27 | O |
| ATOM | 81 | NE2 | GLN A | 12 | 46.743 | 71.118 | 51.655 | 1.00 39.98 | N |
| ATOM | 82 | N | ILE A | 13 | 46.009 | 65.745 | 48.743 | 1.00 31.94 | N |
| ATOM | 83 | CA | ILE A | 13 | 45.148 | 64.598 | 48.486 | 1.00 31.53 | C |
| ATOM | 84 | C | ILE A | 13 | 45.944 | 63.541 | 47.728 | 1.00 31.47 | C |
| ATOM | 85 | O | ILE A | 13 | 45.961 | 62.370 | 48.111 | 1.00 29.85 | O |
| ATOM | 86 | CB | ILE A | 13 | 43.902 | 65.009 | 47.648 | 1.00 31.31 | C |
| ATOM | 87 | CG1 | ILE A | 13 | 42.997 | 65.924 | 48.479 | 1.00 30.41 | C |
| ATOM | 88 | CG2 | ILE A | 13 | 43.143 | 63.772 | 47.193 | 1.00 31.05 | C |
| ATOM | 89 | CD1 | ILE A | 13 | 41.814 | 66.489 | 47.716 | 1.00 30.08 | C |
| ATOM | 90 | N | GLN A | 14 | 46.612 | 63.971 | 46.659 | 1.00 32.76 | N |
| ATOM | 91 | CA | GLN A | 14 | 47.414 | 63.078 | 45.828 | 1.00 34.96 | C |
| ATOM | 92 | C | GLN A | 14 | 48.465 | 62.334 | 46.651 | 1.00 35.94 | C |
| ATOM | 93 | O | GLN A | 14 | 48.641 | 61.124 | 46.496 | 1.00 36.31 | O |
| ATOM | 94 | CB | GLN A | 14 | 48.104 | 63.869 | 44.710 | 1.00 34.58 | C |
| ATOM | 95 | CG | GLN A | 14 | 48.765 | 63.000 | 43.652 | 1.00 35.74 | C |
| ATOM | 96 | CD | GLN A | 14 | 47.772 | 62.104 | 42.940 | 1.00 36.51 | C |
| ATOM | 97 | OE1 | GLN A | 14 | 46.815 | 62.583 | 42.332 | 1.00 38.75 | O |
| ATOM | 98 | NE2 | GLN A | 14 | 47.992 | 60.797 | 43.017 | 1.00 36.15 | N |
| ATOM | 99 | N | GLN A | 15 | 49.162 | 63.053 | 47.526 | 1.00 37.95 | N |
| ATOM | 100 | CA | GLN A | 15 | 50.182 | 62.419 | 48.354 | 1.00 39.42 | C |
| ATOM | 101 | C | GLN A | 15 | 49.580 | 61.336 | 49.228 | 1.00 39.11 | C |
| ATOM | 102 | O | GLN A | 15 | 50.184 | 60.279 | 49.428 | 1.00 38.39 | O |
| ATOM | 103 | CB | GLN A | 15 | 50.886 | 63.434 | 49.252 | 1.00 42.06 | C |
| ATOM | 104 | CG | GLN A | 15 | 51.732 | 62.745 | 50.319 | 1.00 48.09 | C |
| ATOM | 105 | CD | GLN A | 15 | 52.557 | 63.698 | 51.151 | 1.00 51.49 | C |
| ATOM | 106 | OE1 | GLN A | 15 | 53.534 | 64.272 | 50.671 | 1.00 55.49 | O |
| ATOM | 107 | NE2 | GLN A | 15 | 52.169 | 63.873 | 52.409 | 1.00 52.99 | N |
| ATOM | 108 | N | GLU A | 16 | 48.396 | 61.612 | 49.765 | 1.00 38.81 | N |
| ATOM | 109 | CA | GLU A | 16 | 47.709 | 60.651 | 50.615 | 1.00 38.80 | C |
| ATOM | 110 | C | GLU A | 16 | 47.394 | 59.396 | 49.821 | 1.00 37.15 | C |
| ATOM | 111 | O | GLU A | 16 | 47.564 | 58.281 | 50.315 | 1.00 38.06 | O |
| ATOM | 112 | CB | GLU A | 16 | 46.410 | 61.243 | 51.150 | 1.00 41.27 | C |
| ATOM | 113 | CG | GLU A | 16 | 46.585 | 62.317 | 52.201 | 1.00 44.96 | C |
| ATOM | 114 | CD | GLU A | 16 | 45.250 | 62.883 | 52.656 | 1.00 47.99 | C |
| ATOM | 115 | OE1 | GLU A | 16 | 44.358 | 62.085 | 53.026 | 1.00 49.54 | O |
| ATOM | 116 | OE2 | GLU A | 16 | 45.090 | 64.122 | 52.644 | 1.00 48.95 | O |
| ATOM | 117 | N | TRP A | 17 | 46.932 | 59.584 | 48.588 | 1.00 35.00 | N |
| ATOM | 118 | CA | TRP A | 17 | 46.597 | 58.460 | 47.723 | 1.00 35.04 | C |
| ATOM | 119 | C | TRP A | 17 | 47.840 | 57.654 | 47.368 | 1.00 34.68 | C |

| ATOM | 120 | O   | TRP A | 17 | 47.809 | 56.422 | 47.367 | 1.00 35.46 | O |
| ATOM | 121 | CB  | TRP A | 17 | 45.919 | 58.951 | 46.434 | 1.00 32.78 | C |
| ATOM | 122 | CG  | TRP A | 17 | 44.555 | 59.552 | 46.641 | 1.00 30.59 | C |
| ATOM | 123 | CD1 | TRP A | 17 | 43.840 | 59.593 | 47.806 | 1.00 29.35 | C |
| ATOM | 124 | CD2 | TRP A | 17 | 43.736 | 60.185 | 45.645 | 1.00 29.93 | C |
| ATOM | 125 | NE1 | TRP A | 17 | 42.628 | 60.210 | 47.598 | 1.00 29.70 | N |
| ATOM | 126 | CE2 | TRP A | 17 | 42.538 | 60.583 | 46.282 | 1.00 29.54 | C |
| ATOM | 127 | CE3 | TRP A | 17 | 43.899 | 60.453 | 44.277 | 1.00 27.54 | C |
| ATOM | 128 | CZ2 | TRP A | 17 | 41.507 | 61.238 | 45.598 | 1.00 28.39 | C |
| ATOM | 129 | CZ3 | TRP A | 17 | 42.878 | 61.102 | 43.597 | 1.00 29.13 | C |
| ATOM | 130 | CH2 | TRP A | 17 | 41.693 | 61.489 | 44.260 | 1.00 29.25 | C |
| ATOM | 131 | N   | ASP A | 18 | 48.935 | 58.352 | 47.084 | 1.00 35.76 | N |
| ATOM | 132 | CA  | ASP A | 18 | 50.183 | 57.692 | 46.711 | 1.00 36.98 | C |
| ATOM | 133 | C   | ASP A | 18 | 50.963 | 57.066 | 47.859 | 1.00 36.53 | C |
| ATOM | 134 | O   | ASP A | 18 | 51.634 | 56.057 | 47.663 | 1.00 37.55 | O |
| ATOM | 135 | CB  | ASP A | 18 | 51.119 | 58.669 | 45.992 | 1.00 37.19 | C |
| ATOM | 136 | CG  | ASP A | 18 | 50.512 | 59.249 | 44.735 | 1.00 37.37 | C |
| ATOM | 137 | OD1 | ASP A | 18 | 49.817 | 58.511 | 44.007 | 1.00 37.20 | O |
| ATOM | 138 | OD2 | ASP A | 18 | 50.747 | 60.446 | 44.469 | 1.00 38.30 | O |
| ATOM | 139 | N   | THR A | 19 | 50.873 | 57.652 | 49.051 | 1.00 38.02 | N |
| ATOM | 140 | CA  | THR A | 19 | 51.638 | 57.153 | 50.195 | 1.00 37.02 | C |
| ATOM | 141 | C   | THR A | 19 | 50.901 | 56.408 | 51.310 | 1.00 37.17 | C |
| ATOM | 142 | O   | THR A | 19 | 51.534 | 55.686 | 52.078 | 1.00 39.18 | O |
| ATOM | 143 | CB  | THR A | 19 | 52.445 | 58.301 | 50.843 | 1.00 36.92 | C |
| ATOM | 144 | OG1 | THR A | 19 | 51.548 | 59.248 | 51.433 | 1.00 37.40 | O |
| ATOM | 145 | CG2 | THR A | 19 | 53.285 | 59.016 | 49.790 | 1.00 35.71 | C |
| ATOM | 146 | N   | ASN A | 20 | 49.584 | 56.567 | 51.419 | 1.00 35.69 | N |
| ATOM | 147 | CA  | ASN A | 20 | 48.852 | 55.869 | 52.474 | 1.00 34.03 | C |
| ATOM | 148 | C   | ASN A | 20 | 48.511 | 54.438 | 52.059 | 1.00 33.15 | C |
| ATOM | 149 | O   | ASN A | 20 | 47.913 | 54.211 | 51.010 | 1.00 32.64 | O |
| ATOM | 150 | CB  | ASN A | 20 | 47.558 | 56.604 | 52.822 | 1.00 34.36 | C |
| ATOM | 151 | CG  | ASN A | 20 | 46.971 | 56.149 | 54.149 | 1.00 33.69 | C |
| ATOM | 152 | OD1 | ASN A | 20 | 46.939 | 54.956 | 54.457 | 1.00 30.81 | O |
| ATOM | 153 | ND2 | ASN A | 20 | 46.497 | 57.104 | 54.941 | 1.00 35.38 | N |
| ATOM | 154 | N   | PRO A | 21 | 48.887 | 53.452 | 52.886 | 1.00 32.61 | N |
| ATOM | 155 | CA  | PRO A | 21 | 48.616 | 52.041 | 52.593 | 1.00 32.64 | C |
| ATOM | 156 | C   | PRO A | 21 | 47.124 | 51.765 | 52.394 | 1.00 32.36 | C |
| ATOM | 157 | O   | PRO A | 21 | 46.743 | 50.793 | 51.739 | 1.00 31.97 | O |
| ATOM | 158 | CB  | PRO A | 21 | 49.180 | 51.322 | 53.817 | 1.00 32.47 | C |
| ATOM | 159 | CG  | PRO A | 21 | 50.292 | 52.210 | 54.244 | 1.00 31.57 | C |
| ATOM | 160 | CD  | PRO A | 21 | 49.668 | 53.580 | 54.128 | 1.00 31.67 | C |
| ATOM | 161 | N   | ARG A | 22 | 46.284 | 52.623 | 52.966 | 1.00 30.53 | N |
| ATOM | 162 | CA  | ARG A | 22 | 44.840 | 52.469 | 52.834 | 1.00 30.65 | C |
| ATOM | 163 | C   | ARG A | 22 | 44.417 | 52.414 | 51.367 | 1.00 30.84 | C |
| ATOM | 164 | O   | ARG A | 22 | 43.447 | 51.745 | 51.020 | 1.00 29.98 | O |
| ATOM | 165 | CB  | ARG A | 22 | 44.114 | 53.637 | 53.507 | 1.00 29.51 | C |
| ATOM | 166 | CG  | ARG A | 22 | 42.612 | 53.668 | 53.241 | 1.00 26.99 | C |
| ATOM | 167 | CD  | ARG A | 22 | 41.898 | 52.496 | 53.899 | 1.00 26.32 | C |
| ATOM | 168 | NE  | ARG A | 22 | 40.447 | 52.586 | 53.740 | 1.00 25.55 | N |
| ATOM | 169 | CZ  | ARG A | 22 | 39.779 | 52.225 | 52.648 | 1.00 25.98 | C |
| ATOM | 170 | NH1 | ARG A | 22 | 40.424 | 51.732 | 51.596 | 1.00 25.41 | N |
| ATOM | 171 | NH2 | ARG A | 22 | 38.460 | 52.371 | 52.603 | 1.00 25.29 | N |
| ATOM | 172 | N   | TRP A | 23 | 45.158 | 53.118 | 50.515 | 1.00 29.84 | N |
| ATOM | 173 | CA  | TRP A | 23 | 44.847 | 53.183 | 49.096 | 1.00 30.17 | C |
| ATOM | 174 | C   | TRP A | 23 | 45.745 | 52.324 | 48.215 | 1.00 30.92 | C |
| ATOM | 175 | O   | TRP A | 23 | 45.718 | 52.451 | 46.994 | 1.00 29.48 | O |
| ATOM | 176 | CB  | TRP A | 23 | 44.920 | 54.637 | 48.643 | 1.00 29.47 | C |
| ATOM | 177 | CG  | TRP A | 23 | 44.180 | 55.548 | 49.558 | 1.00 27.90 | C |
| ATOM | 178 | CD1 | TRP A | 23 | 44.686 | 56.613 | 50.237 | 1.00 27.98 | C |
| ATOM | 179 | CD2 | TRP A | 23 | 42.789 | 55.478 | 49.896 | 1.00 27.26 | C |
| ATOM | 180 | NE1 | TRP A | 23 | 43.697 | 57.217 | 50.980 | 1.00 27.42 | N |
| ATOM | 181 | CE2 | TRP A | 23 | 42.522 | 56.539 | 50.787 | 1.00 27.50 | C |
| ATOM | 182 | CE3 | TRP A | 23 | 41.741 | 54.621 | 49.530 | 1.00 27.68 | C |
| ATOM | 183 | CZ2 | TRP A | 23 | 41.246 | 56.769 | 51.320 | 1.00 28.66 | C |
| ATOM | 184 | CZ3 | TRP A | 23 | 40.470 | 54.848 | 50.062 | 1.00 26.29 | C |
| ATOM | 185 | CH2 | TRP A | 23 | 40.237 | 55.914 | 50.946 | 1.00 28.08 | C |
| ATOM | 186 | N   | LYS A | 24 | 46.523 | 51.447 | 48.839 | 1.00 33.48 | N |
| ATOM | 187 | CA  | LYS A | 24 | 47.444 | 50.568 | 48.123 | 1.00 35.30 | C |
| ATOM | 188 | C   | LYS A | 24 | 46.837 | 49.896 | 46.892 | 1.00 35.55 | C |
| ATOM | 189 | O   | LYS A | 24 | 47.445 | 49.886 | 45.821 | 1.00 36.69 | O |
| ATOM | 190 | CB  | LYS A | 24 | 47.979 | 49.487 | 49.068 | 1.00 36.90 | C |
| ATOM | 191 | CG  | LYS A | 24 | 48.906 | 48.485 | 48.401 | 1.00 40.44 | C |
| ATOM | 192 | CD  | LYS A | 24 | 49.211 | 47.301 | 49.309 | 1.00 44.18 | C |
| ATOM | 193 | CE  | LYS A | 24 | 47.945 | 46.518 | 49.646 | 1.00 46.51 | C |
| ATOM | 194 | NZ  | LYS A | 24 | 48.209 | 45.247 | 50.388 | 1.00 47.61 | N |
| ATOM | 195 | N   | ASP A | 25 | 45.642 | 49.335 | 47.035 | 1.00 34.97 | N |
| ATOM | 196 | CA  | ASP A | 25 | 45.013 | 48.645 | 45.912 | 1.00 34.41 | C |
| ATOM | 197 | C   | ASP A | 25 | 43.776 | 49.348 | 45.383 | 1.00 32.50 | C |
| ATOM | 198 | O   | ASP A | 25 | 42.931 | 48.728 | 44.743 | 1.00 32.83 | O |
| ATOM | 199 | CB  | ASP A | 25 | 44.647 | 47.218 | 46.327 | 1.00 35.98 | C |

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ATOM   200  CG  ASP A  25      45.806  46.494  46.990  1.00 37.51           C
ATOM   201  OD1 ASP A  25      46.938  46.606  46.475  1.00 38.49           O
ATOM   202  OD2 ASP A  25      45.587  45.812  48.018  1.00 36.92           O
ATOM   203  N   VAL A  26      43.675  50.648  45.627  1.00 31.49           N
ATOM   204  CA  VAL A  26      42.507  51.389  45.179  1.00 29.89           C
ATOM   205  C   VAL A  26      42.688  52.150  43.878  1.00 29.78           C
ATOM   206  O   VAL A  26      43.571  52.996  43.754  1.00 30.01           O
ATOM   207  CB  VAL A  26      42.036  52.380  46.267  1.00 28.45           C
ATOM   208  CG1 VAL A  26      40.796  53.133  45.791  1.00 23.14           C
ATOM   209  CG2 VAL A  26      41.746  51.626  47.559  1.00 25.78           C
ATOM   210  N   THR A  27      41.829  51.854  42.910  1.00 30.30           N
ATOM   211  CA  THR A  27      41.873  52.533  41.623  1.00 29.65           C
ATOM   212  C   THR A  27      40.831  53.650  41.602  1.00 29.25           C
ATOM   213  O   THR A  27      39.687  53.450  42.010  1.00 29.39           O
ATOM   214  CB  THR A  27      41.578  51.554  40.465  1.00 30.67           C
ATOM   215  OG1 THR A  27      42.609  50.561  40.405  1.00 32.32           O
ATOM   216  CG2 THR A  27      41.502  52.296  39.134  1.00 28.74           C
ATOM   217  N   ARG A  28      41.244  54.823  41.139  1.00 27.96           N
ATOM   218  CA  ARG A  28      40.365  55.983  41.031  1.00 28.58           C
ATOM   219  C   ARG A  28      40.461  56.494  39.592  1.00 29.12           C
ATOM   220  O   ARG A  28      41.531  56.929  39.164  1.00 30.31           O
ATOM   221  CB  ARG A  28      40.810  57.097  41.987  1.00 27.79           C
ATOM   222  CG  ARG A  28      40.611  56.818  43.473  1.00 28.31           C
ATOM   223  CD  ARG A  28      40.899  58.091  44.274  1.00 27.89           C
ATOM   224  NE  ARG A  28      40.433  58.041  45.660  1.00 27.38           N
ATOM   225  CZ  ARG A  28      41.031  57.379  46.650  1.00 28.45           C
ATOM   226  NH1 ARG A  28      42.141  56.687  46.431  1.00 26.62           N
ATOM   227  NH2 ARG A  28      40.519  57.423  47.876  1.00 29.64           N
ATOM   228  N   THR A  29      39.357  56.450  38.851  1.00 27.71           N
ATOM   229  CA  THR A  29      39.362  56.909  37.463  1.00 28.15           C
ATOM   230  C   THR A  29      39.204  58.420  37.312  1.00 28.53           C
ATOM   231  O   THR A  29      39.018  58.927  36.206  1.00 29.59           O
ATOM   232  CB  THR A  29      38.267  56.202  36.618  1.00 28.18           C
ATOM   233  OG1 THR A  29      36.978  56.419  37.206  1.00 25.37           O
ATOM   234  CG2 THR A  29      38.559  54.696  36.519  1.00 25.45           C
ATOM   235  N   TYR A  30      39.261  59.137  38.427  1.00 28.17           N
ATOM   236  CA  TYR A  30      39.169  60.592  38.404  1.00 27.43           C
ATOM   237  C   TYR A  30      40.414  61.108  39.112  1.00 27.23           C
ATOM   238  O   TYR A  30      41.194  60.320  39.646  1.00 26.69           O
ATOM   239  CB  TYR A  30      37.890  61.080  39.096  1.00 26.36           C
ATOM   240  CG  TYR A  30      37.618  60.434  40.431  1.00 27.20           C
ATOM   241  CD1 TYR A  30      38.315  60.820  41.575  1.00 26.48           C
ATOM   242  CD2 TYR A  30      36.659  59.428  40.552  1.00 26.31           C
ATOM   243  CE1 TYR A  30      38.061  60.223  42.813  1.00 25.53           C
ATOM   244  CE2 TYR A  30      36.400  58.823  41.783  1.00 28.29           C
ATOM   245  CZ  TYR A  30      37.101  59.226  42.908  1.00 26.59           C
ATOM   246  OH  TYR A  30      36.826  58.638  44.122  1.00 25.14           O
ATOM   247  N   SER A  31      40.607  62.419  39.127  1.00 26.87           N
ATOM   248  CA  SER A  31      41.807  62.973  39.734  1.00 25.52           C
ATOM   249  C   SER A  31      41.570  63.773  41.001  1.00 26.35           C
ATOM   250  O   SER A  31      40.446  64.187  41.297  1.00 25.06           O
ATOM   251  CB  SER A  31      42.509  63.868  38.727  1.00 23.26           C
ATOM   252  OG  SER A  31      41.729  65.027  38.500  1.00 23.78           O
ATOM   253  N   ALA A  32      42.656  63.996  41.737  1.00 26.56           N
ATOM   254  CA  ALA A  32      42.615  64.776  42.969  1.00 27.28           C
ATOM   255  C   ALA A  32      42.027  66.139  42.635  1.00 29.28           C
ATOM   256  O   ALA A  32      41.243  66.694  43.413  1.00 30.20           O
ATOM   257  CB  ALA A  32      44.022  64.937  43.537  1.00 25.08           C
ATOM   258  N   GLU A  33      42.412  66.674  41.475  1.00 29.10           N
ATOM   259  CA  GLU A  33      41.916  67.968  41.018  1.00 30.98           C
ATOM   260  C   GLU A  33      40.394  67.949  40.904  1.00 29.79           C
ATOM   261  O   GLU A  33      39.734  68.941  41.210  1.00 30.33           O
ATOM   262  CB  GLU A  33      42.512  68.333  39.650  1.00 34.94           C
ATOM   263  CG  GLU A  33      44.013  68.607  39.640  1.00 38.96           C
ATOM   264  CD  GLU A  33      44.840  67.389  40.021  1.00 42.56           C
ATOM   265  OE1 GLU A  33      44.712  66.333  39.355  1.00 42.59           O
ATOM   266  OE2 GLU A  33      45.623  67.489  40.990  1.00 44.28           O
ATOM   267  N   ASP A  34      39.845  66.822  40.451  1.00 28.77           N
ATOM   268  CA  ASP A  34      38.399  66.679  40.301  1.00 28.58           C
ATOM   269  C   ASP A  34      37.709  66.705  41.658  1.00 27.83           C
ATOM   270  O   ASP A  34      36.633  67.285  41.807  1.00 28.65           O
ATOM   271  CB  ASP A  34      38.050  65.373  39.578  1.00 28.79           C
ATOM   272  CG  ASP A  34      38.534  65.356  38.141  1.00 28.91           C
ATOM   273  OD1 ASP A  34      38.521  66.433  37.502  1.00 26.81           O
ATOM   274  OD2 ASP A  34      38.913  64.268  37.654  1.00 28.80           O
ATOM   275  N   VAL A  35      38.332  66.075  42.648  1.00 25.96           N
ATOM   276  CA  VAL A  35      37.768  66.050  43.987  1.00 24.88           C
ATOM   277  C   VAL A  35      37.704  67.467  44.550  1.00 25.56           C
ATOM   278  O   VAL A  35      36.669  67.902  45.057  1.00 26.49           O
ATOM   279  CB  VAL A  35      38.614  65.173  44.919  1.00 23.89           C
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| ATOM | 280 | CG1 | VAL | A | 35 | 38.061 | 65.225 | 46.327 | 1.00 | 21.73 | C |
|------|-----|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 281 | CG2 | VAL | A | 35 | 38.629 | 63.742 | 44.399 | 1.00 | 24.48 | C |
| ATOM | 282 | N | VAL | A | 36 | 38.814 | 68.189 | 44.445 | 1.00 | 24.78 | N |
| ATOM | 283 | CA | VAL | A | 36 | 38.886 | 69.552 | 44.951 | 1.00 | 25.22 | C |
| ATOM | 284 | C | VAL | A | 36 | 37.829 | 70.459 | 44.318 | 1.00 | 24.96 | C |
| ATOM | 285 | O | VAL | A | 36 | 37.163 | 71.229 | 45.013 | 1.00 | 24.09 | O |
| ATOM | 286 | CB | VAL | A | 36 | 40.288 | 70.160 | 44.705 | 1.00 | 25.50 | C |
| ATOM | 287 | CG1 | VAL | A | 36 | 40.304 | 71.633 | 45.107 | 1.00 | 25.54 | C |
| ATOM | 288 | CG2 | VAL | A | 36 | 41.323 | 69.383 | 45.495 | 1.00 | 23.73 | C |
| ATOM | 289 | N | ALA | A | 37 | 37.675 | 70.364 | 43.000 | 1.00 | 24.11 | N |
| ATOM | 290 | CA | ALA | A | 37 | 36.701 | 71.186 | 42.287 | 1.00 | 23.19 | C |
| ATOM | 291 | C | ALA | A | 37 | 35.280 | 71.034 | 42.830 | 1.00 | 23.51 | C |
| ATOM | 292 | O | ALA | A | 37 | 34.448 | 71.930 | 42.677 | 1.00 | 23.41 | O |
| ATOM | 293 | CB | ALA | A | 37 | 36.719 | 70.837 | 40.805 | 1.00 | 25.57 | C |
| ATOM | 294 | N | LEU | A | 38 | 35.005 | 69.906 | 43.474 | 1.00 | 21.66 | N |
| ATOM | 295 | CA | LEU | A | 38 | 33.671 | 69.647 | 43.999 | 1.00 | 22.88 | C |
| ATOM | 296 | C | LEU | A | 38 | 33.470 | 70.020 | 45.470 | 1.00 | 24.35 | C |
| ATOM | 297 | O | LEU | A | 38 | 32.349 | 69.972 | 45.977 | 1.00 | 23.42 | O |
| ATOM | 298 | CB | LEU | A | 38 | 33.331 | 68.161 | 43.786 | 1.00 | 20.79 | C |
| ATOM | 299 | CG | LEU | A | 38 | 33.235 | 67.697 | 42.320 | 1.00 | 22.24 | C |
| ATOM | 300 | CD1 | LEU | A | 38 | 33.101 | 66.177 | 42.239 | 1.00 | 21.22 | C |
| ATOM | 301 | CD2 | LEU | A | 38 | 32.038 | 68.374 | 41.652 | 1.00 | 21.39 | C |
| ATOM | 302 | N | GLN | A | 39 | 34.547 | 70.424 | 46.141 | 1.00 | 25.81 | N |
| ATOM | 303 | CA | GLN | A | 39 | 34.489 | 70.744 | 47.569 | 1.00 | 25.29 | C |
| ATOM | 304 | C | GLN | A | 39 | 34.108 | 72.149 | 48.011 | 1.00 | 24.50 | C |
| ATOM | 305 | O | GLN | A | 39 | 34.068 | 72.424 | 49.210 | 1.00 | 26.00 | O |
| ATOM | 306 | CB | GLN | A | 39 | 35.826 | 70.376 | 48.222 | 1.00 | 26.30 | C |
| ATOM | 307 | CG | GLN | A | 39 | 36.199 | 68.914 | 48.058 | 1.00 | 29.42 | C |
| ATOM | 308 | CD | GLN | A | 39 | 37.489 | 68.561 | 48.761 | 1.00 | 29.86 | C |
| ATOM | 309 | OE1 | GLN | A | 39 | 38.515 | 69.214 | 48.554 | 1.00 | 32.79 | O |
| ATOM | 310 | NE2 | GLN | A | 39 | 37.452 | 67.520 | 49.594 | 1.00 | 27.02 | N |
| ATOM | 311 | N | GLY | A | 40 | 33.821 | 73.043 | 47.076 | 1.00 | 25.12 | N |
| ATOM | 312 | CA | GLY | A | 40 | 33.475 | 74.393 | 47.484 | 1.00 | 24.46 | C |
| ATOM | 313 | C | GLY | A | 40 | 34.657 | 74.982 | 48.237 | 1.00 | 26.30 | C |
| ATOM | 314 | O | GLY | A | 40 | 35.795 | 74.548 | 48.041 | 1.00 | 26.00 | O |
| ATOM | 315 | N | SER | A | 41 | 34.409 | 75.954 | 49.108 | 1.00 | 25.79 | N |
| ATOM | 316 | CA | SER | A | 41 | 35.506 | 76.565 | 49.847 | 1.00 | 26.26 | C |
| ATOM | 317 | C | SER | A | 41 | 35.527 | 76.166 | 51.315 | 1.00 | 26.20 | C |
| ATOM | 318 | O | SER | A | 41 | 36.347 | 76.656 | 52.090 | 1.00 | 27.58 | O |
| ATOM | 319 | CB | SER | A | 41 | 35.458 | 78.090 | 49.708 | 1.00 | 26.20 | C |
| ATOM | 320 | OG | SER | A | 41 | 34.209 | 78.611 | 50.106 | 1.00 | 30.96 | O |
| ATOM | 321 | N | VAL | A | 42 | 34.630 | 75.262 | 51.687 | 1.00 | 25.62 | N |
| ATOM | 322 | CA | VAL | A | 42 | 34.552 | 74.779 | 53.059 | 1.00 | 25.23 | C |
| ATOM | 323 | C | VAL | A | 42 | 34.196 | 73.300 | 53.081 | 1.00 | 25.36 | C |
| ATOM | 324 | O | VAL | A | 42 | 33.232 | 72.878 | 52.437 | 1.00 | 24.39 | O |
| ATOM | 325 | CB | VAL | A | 42 | 33.493 | 75.548 | 53.869 | 1.00 | 24.47 | C |
| ATOM | 326 | CG1 | VAL | A | 42 | 33.341 | 74.924 | 55.249 | 1.00 | 24.64 | C |
| ATOM | 327 | CG2 | VAL | A | 42 | 33.896 | 77.009 | 53.993 | 1.00 | 24.93 | C |
| ATOM | 328 | N | VAL | A | 43 | 34.983 | 72.522 | 53.820 | 1.00 | 24.25 | N |
| ATOM | 329 | CA | VAL | A | 43 | 34.759 | 71.091 | 53.946 | 1.00 | 25.08 | C |
| ATOM | 330 | C | VAL | A | 43 | 34.419 | 70.740 | 55.390 | 1.00 | 24.92 | C |
| ATOM | 331 | O | VAL | A | 43 | 35.193 | 71.006 | 56.307 | 1.00 | 25.17 | O |
| ATOM | 332 | CB | VAL | A | 43 | 36.009 | 70.280 | 53.508 | 1.00 | 26.89 | C |
| ATOM | 333 | CG1 | VAL | A | 43 | 35.804 | 68.795 | 53.801 | 1.00 | 25.75 | C |
| ATOM | 334 | CG2 | VAL | A | 43 | 36.260 | 70.483 | 52.022 | 1.00 | 26.09 | C |
| ATOM | 335 | N | GLU | A | 44 | 33.246 | 70.151 | 55.585 | 1.00 | 24.82 | N |
| ATOM | 336 | CA | GLU | A | 44 | 32.803 | 69.753 | 56.909 | 1.00 | 23.98 | C |
| ATOM | 337 | C | GLU | A | 44 | 33.551 | 68.510 | 57.360 | 1.00 | 24.51 | C |
| ATOM | 338 | O | GLU | A | 44 | 33.737 | 67.567 | 56.588 | 1.00 | 25.39 | O |
| ATOM | 339 | CB | GLU | A | 44 | 31.304 | 69.446 | 56.903 | 1.00 | 22.67 | C |
| ATOM | 340 | CG | GLU | A | 44 | 30.409 | 70.655 | 56.889 | 1.00 | 22.71 | C |
| ATOM | 341 | CD | GLU | A | 44 | 28.943 | 70.273 | 56.914 | 1.00 | 23.21 | C |
| ATOM | 342 | OE1 | GLU | A | 44 | 28.439 | 69.791 | 55.879 | 1.00 | 25.92 | O |
| ATOM | 343 | OE2 | GLU | A | 44 | 28.296 | 70.442 | 57.968 | 1.00 | 23.05 | O |
| ATOM | 344 | N | GLU | A | 45 | 33.980 | 68.515 | 58.614 | 1.00 | 24.11 | N |
| ATOM | 345 | CA | GLU | A | 45 | 34.674 | 67.373 | 59.174 | 1.00 | 24.89 | C |
| ATOM | 346 | C | GLU | A | 45 | 33.599 | 66.386 | 59.627 | 1.00 | 25.25 | C |
| ATOM | 347 | O | GLU | A | 45 | 32.596 | 66.783 | 60.224 | 1.00 | 24.87 | O |
| ATOM | 348 | CB | GLU | A | 45 | 35.521 | 67.815 | 60.366 | 1.00 | 26.87 | C |
| ATOM | 349 | CG | GLU | A | 45 | 36.070 | 66.683 | 61.221 | 1.00 | 29.37 | C |
| ATOM | 350 | CD | GLU | A | 45 | 37.030 | 65.779 | 60.475 | 1.00 | 31.30 | C |
| ATOM | 351 | OE1 | GLU | A | 45 | 37.444 | 66.128 | 59.348 | 1.00 | 35.06 | O |
| ATOM | 352 | OE2 | GLU | A | 45 | 37.381 | 64.716 | 61.025 | 1.00 | 31.93 | O |
| ATOM | 353 | N | HIS | A | 46 | 33.806 | 65.110 | 59.318 | 1.00 | 23.67 | N |
| ATOM | 354 | CA | HIS | A | 46 | 32.876 | 64.052 | 59.695 | 1.00 | 22.80 | C |
| ATOM | 355 | C | HIS | A | 46 | 33.617 | 63.103 | 60.636 | 1.00 | 21.98 | C |
| ATOM | 356 | O | HIS | A | 46 | 34.085 | 62.031 | 60.243 | 1.00 | 21.59 | O |
| ATOM | 357 | CB | HIS | A | 46 | 32.384 | 63.322 | 58.442 | 1.00 | 21.60 | C |
| ATOM | 358 | CG | HIS | A | 46 | 31.662 | 64.214 | 57.479 | 1.00 | 22.29 | C |
| ATOM | 359 | ND1 | HIS | A | 46 | 30.485 | 64.857 | 57.800 | 1.00 | 23.10 | N |

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ATOM   360  CD2 HIS A  46      31.958  64.585  56.210  1.00 22.32           C
ATOM   361  CE1 HIS A  46      30.088  65.586  56.770  1.00 23.01           C
ATOM   362  NE2 HIS A  46      30.964  65.438  55.792  1.00 21.41           N
ATOM   363  N   THR A  47      33.718  63.532  61.891  1.00 22.20           N
ATOM   364  CA  THR A  47      34.418  62.797  62.935  1.00 19.78           C
ATOM   365  C   THR A  47      34.083  61.311  63.043  1.00 20.62           C
ATOM   366  O   THR A  47      34.982  60.470  62.954  1.00 20.53           O
ATOM   367  CB  THR A  47      34.181  63.467  64.302  1.00 20.45           C
ATOM   368  OG1 THR A  47      34.527  64.859  64.211  1.00 18.07           O
ATOM   369  CG2 THR A  47      35.025  62.798  65.384  1.00 19.02           C
ATOM   370  N   LEU A  48      32.804  60.978  63.219  1.00 20.28           N
ATOM   371  CA  LEU A  48      32.415  59.575  63.361  1.00 19.82           C
ATOM   372  C   LEU A  48      32.606  58.752  62.090  1.00 18.94           C
ATOM   373  O   LEU A  48      32.867  57.550  62.156  1.00 19.75           O
ATOM   374  CB  LEU A  48      30.961  59.460  63.841  1.00 19.52           C
ATOM   375  CG  LEU A  48      30.658  59.996  65.242  1.00 19.73           C
ATOM   376  CD1 LEU A  48      29.226  59.633  65.639  1.00 17.61           C
ATOM   377  CD2 LEU A  48      31.645  59.405  66.236  1.00 19.69           C
ATOM   378  N   ALA A  49      32.472  59.387  60.933  1.00 17.19           N
ATOM   379  CA  ALA A  49      32.658  58.670  59.679  1.00 18.77           C
ATOM   380  C   ALA A  49      34.143  58.351  59.478  1.00 18.92           C
ATOM   381  O   ALA A  49      34.495  57.282  58.977  1.00 19.48           O
ATOM   382  CB  ALA A  49      32.138  59.499  58.517  1.00 15.41           C
ATOM   383  N   ARG A  50      35.008  59.280  59.876  1.00 20.97           N
ATOM   384  CA  ARG A  50      36.451  59.095  59.734  1.00 22.44           C
ATOM   385  C   ARG A  50      36.963  58.061  60.718  1.00 23.82           C
ATOM   386  O   ARG A  50      37.646  57.109  60.342  1.00 25.41           O
ATOM   387  CB  ARG A  50      37.195  60.412  59.975  1.00 23.12           C
ATOM   388  CG  ARG A  50      38.720  60.292  59.834  1.00 22.01           C
ATOM   389  CD  ARG A  50      39.434  61.593  60.177  1.00 18.03           C
ATOM   390  NE  ARG A  50      38.855  62.743  59.487  1.00 19.79           N
ATOM   391  CZ  ARG A  50      38.913  62.943  58.174  1.00 21.23           C
ATOM   392  NH1 ARG A  50      39.530  62.071  57.387  1.00 22.22           N
ATOM   393  NH2 ARG A  50      38.348  64.019  57.646  1.00 21.50           N
ATOM   394  N   ARG A  51      36.624  58.254  61.987  1.00 24.68           N
ATOM   395  CA  ARG A  51      37.060  57.352  63.041  1.00 23.41           C
ATOM   396  C   ARG A  51      36.581  55.926  62.768  1.00 23.48           C
ATOM   397  O   ARG A  51      37.351  54.972  62.882  1.00 24.27           O
ATOM   398  CB  ARG A  51      36.528  57.847  64.389  1.00 22.40           C
ATOM   399  CG  ARG A  51      37.101  57.138  65.605  1.00 23.44           C
ATOM   400  CD  ARG A  51      36.525  57.733  66.877  1.00 23.66           C
ATOM   401  NE  ARG A  51      37.167  57.218  68.083  1.00 24.95           N
ATOM   402  CZ  ARG A  51      37.011  55.987  68.559  1.00 26.61           C
ATOM   403  NH1 ARG A  51      36.225  55.117  67.937  1.00 25.89           N
ATOM   404  NH2 ARG A  51      37.642  55.626  59.669  1.00 27.30           N
ATOM   405  N   GLY A  52      35.311  55.791  62.398  1.00 23.28           N
ATOM   406  CA  GLY A  52      34.747  54.478  62.121  1.00 21.70           C
ATOM   407  C   GLY A  52      35.414  53.757  60.963  1.00 22.12           C
ATOM   408  O   GLY A  52      35.641  52.546  61.020  1.00 21.13           O
ATOM   409  N   ALA A  53      35.724  54.495  59.903  1.00 22.79           N
ATOM   410  CA  ALA A  53      36.377  53.900  58.741  1.00 22.96           C
ATOM   411  C   ALA A  53      37.785  53.463  59.133  1.00 23.97           C
ATOM   412  O   ALA A  53      38.234  52.373  58.766  1.00 23.29           O
ATOM   413  CB  ALA A  53      36.441  54.904  57.590  1.00 21.58           C
ATOM   414  N   GLU A  54      38.478  54.313  59.884  1.00 23.30           N
ATOM   415  CA  GLU A  54      39.833  53.993  60.321  1.00 24.31           C
ATOM   416  C   GLU A  54      39.850  52.756  61.213  1.00 23.56           C
ATOM   417  O   GLU A  54      40.646  51.843  61.004  1.00 24.60           O
ATOM   418  CB  GLU A  54      40.446  55.190  61.052  1.00 24.00           C
ATOM   419  CG  GLU A  54      41.144  56.168  60.113  1.00 26.06           C
ATOM   420  CD  GLU A  54      41.583  57.447  60.801  1.00 27.22           C
ATOM   421  OE1 GLU A  54      41.817  57.421  62.029  1.00 29.75           O
ATOM   422  OE2 GLU A  54      41.706  58.479  60.109  1.00 26.25           O
ATOM   423  N   VAL A  55      38.959  52.725  62.197  1.00 23.64           N
ATOM   424  CA  VAL A  55      38.867  51.595  63.112  1.00 21.26           C
ATOM   425  C   VAL A  55      38.472  50.329  62.370  1.00 22.46           C
ATOM   426  O   VAL A  55      39.024  49.253  62.627  1.00 23.45           O
ATOM   427  CB  VAL A  55      37.817  51.840  64.214  1.00 18.63           C
ATOM   428  CG1 VAL A  55      37.657  50.591  65.064  1.00 17.86           C
ATOM   429  CG2 VAL A  55      38.228  53.019  65.075  1.00 19.08           C
ATOM   430  N   LEU A  56      37.512  50.454  61.454  1.00 22.73           N
ATOM   431  CA  LEU A  56      37.042  49.296  60.696  1.00 23.11           C
ATOM   432  C   LEU A  56      38.164  48.691  59.865  1.00 23.05           C
ATOM   433  O   LEU A  56      38.421  47.490  59.938  1.00 22.87           O
ATOM   434  CB  LEU A  56      35.876  49.679  59.781  1.00 20.73           C
ATOM   435  CG  LEU A  56      35.395  48.553  58.859  1.00 21.09           C
ATOM   436  CD1 LEU A  56      34.877  47.396  59.693  1.00 18.49           C
ATOM   437  CD2 LEU A  56      34.310  49.084  57.917  1.00 20.45           C
ATOM   438  N   TRP A  57      38.822  49.533  59.076  1.00 25.01           N
ATOM   439  CA  TRP A  57      39.922  49.098  58.231  1.00 29.18           C
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| ATOM | 440 | C   | TRP A | 57 | 40.951 | 48.361 | 59.084 | 1.00 | 30.98 | C |
| ATOM | 441 | O   | TRP A | 57 | 41.390 | 47.270 | 58.731 | 1.00 | 31.00 | O |
| ATOM | 442 | CB  | TRP A | 57 | 40.565 | 50.307 | 57.541 | 1.00 | 30.90 | C |
| ATOM | 443 | CG  | TRP A | 57 | 41.579 | 49.936 | 56.500 | 1.00 | 33.52 | C |
| ATOM | 444 | CD1 | TRP A | 57 | 42.927 | 50.128 | 56.565 | 1.00 | 33.01 | C |
| ATOM | 445 | CD2 | TRP A | 57 | 41.324 | 49.294 | 55.243 | 1.00 | 34.86 | C |
| ATOM | 446 | NE1 | TRP A | 57 | 43.531 | 49.645 | 55.427 | 1.00 | 35.37 | N |
| ATOM | 447 | CE2 | TRP A | 57 | 42.572 | 49.129 | 54.597 | 1.00 | 34.30 | C |
| ATOM | 448 | CE3 | TRP A | 57 | 40.164 | 48.841 | 54.599 | 1.00 | 33.98 | C |
| ATOM | 449 | CZ2 | TRP A | 57 | 42.694 | 48.531 | 53.338 | 1.00 | 33.09 | C |
| ATOM | 450 | CZ3 | TRP A | 57 | 40.285 | 48.243 | 53.343 | 1.00 | 35.02 | C |
| ATOM | 451 | CH2 | TRP A | 57 | 41.544 | 48.095 | 52.728 | 1.00 | 33.61 | C |
| ATOM | 452 | N   | GLU A | 58 | 41.320 | 48.952 | 60.217 | 1.00 | 33.42 | N |
| ATOM | 453 | CA  | GLU A | 58 | 42.287 | 48.333 | 61.113 | 1.00 | 34.06 | C |
| ATOM | 454 | C   | GLU A | 58 | 41.838 | 46.956 | 61.585 | 1.00 | 33.47 | C |
| ATOM | 455 | O   | GLU A | 58 | 42.598 | 45.987 | 61.501 | 1.00 | 33.47 | O |
| ATOM | 456 | CB  | GLU A | 58 | 42.525 | 49.215 | 62.335 | 1.00 | 37.36 | C |
| ATOM | 457 | CG  | GLU A | 58 | 43.477 | 50.373 | 62.110 | 1.00 | 43.34 | C |
| ATOM | 458 | CD  | GLU A | 58 | 43.668 | 51.196 | 63.369 | 1.00 | 47.42 | C |
| ATOM | 459 | OE1 | GLU A | 58 | 43.984 | 50.596 | 64.424 | 1.00 | 48.38 | O |
| ATOM | 460 | OE2 | GLU A | 58 | 43.501 | 52.438 | 63.302 | 1.00 | 49.74 | O |
| ATOM | 461 | N   | GLN A | 59 | 40.611 | 46.869 | 62.089 | 1.00 | 30.51 | N |
| ATOM | 462 | CA  | GLN A | 59 | 40.104 | 45.599 | 62.587 | 1.00 | 29.29 | C |
| ATOM | 463 | C   | GLN A | 59 | 40.098 | 44.533 | 61.494 | 1.00 | 29.31 | C |
| ATOM | 464 | O   | GLN A | 59 | 40.345 | 43.360 | 61.765 | 1.00 | 28.24 | O |
| ATOM | 465 | CB  | GLN A | 59 | 38.691 | 45.765 | 63.161 | 1.00 | 29.90 | C |
| ATOM | 466 | CG  | GLN A | 59 | 38.564 | 46.761 | 64.309 | 1.00 | 28.71 | C |
| ATOM | 467 | CD  | GLN A | 59 | 37.160 | 46.776 | 64.902 | 1.00 | 31.38 | C |
| ATOM | 468 | OE1 | GLN A | 59 | 36.182 | 46.527 | 64.200 | 1.00 | 30.18 | O |
| ATOM | 469 | NE2 | GLN A | 59 | 37.055 | 47.081 | 66.193 | 1.00 | 30.07 | N |
| ATOM | 470 | N   | LEU A | 60 | 39.818 | 44.938 | 60.260 | 1.00 | 29.51 | N |
| ATOM | 471 | CA  | LEU A | 60 | 39.796 | 43.991 | 59.151 | 1.00 | 30.84 | C |
| ATOM | 472 | C   | LEU A | 60 | 41.171 | 43.363 | 58.917 | 1.00 | 32.82 | C |
| ATOM | 473 | O   | LEU A | 60 | 41.283 | 42.320 | 58.274 | 1.00 | 31.74 | O |
| ATOM | 474 | CB  | LEU A | 60 | 39.315 | 44.677 | 57.871 | 1.00 | 28.91 | C |
| ATOM | 475 | CG  | LEU A | 60 | 37.826 | 45.018 | 57.827 | 1.00 | 27.58 | C |
| ATOM | 476 | CD1 | LEU A | 60 | 37.486 | 45.756 | 56.545 | 1.00 | 25.75 | C |
| ATOM | 477 | CD2 | LEU A | 60 | 37.029 | 43.736 | 57.938 | 1.00 | 27.41 | C |
| ATOM | 478 | N   | HIS A | 61 | 42.212 | 44.001 | 59.440 | 1.00 | 34.31 | N |
| ATOM | 479 | CA  | HIS A | 61 | 43.569 | 43.489 | 59.289 | 1.00 | 38.18 | C |
| ATOM | 480 | C   | HIS A | 61 | 44.097 | 42.820 | 60.571 | 1.00 | 39.59 | C |
| ATOM | 481 | O   | HIS A | 61 | 44.725 | 41.762 | 60.509 | 1.00 | 39.33 | O |
| ATOM | 482 | CB  | HIS A | 61 | 44.511 | 44.624 | 58.864 | 1.00 | 40.31 | C |
| ATOM | 483 | CG  | HIS A | 61 | 44.234 | 45.159 | 57.490 | 1.00 | 42.80 | C |
| ATOM | 484 | ND1 | HIS A | 61 | 44.582 | 44.480 | 56.342 | 1.00 | 43.78 | N |
| ATOM | 485 | CD2 | HIS A | 61 | 43.623 | 46.297 | 57.081 | 1.00 | 43.50 | C |
| ATOM | 486 | CE1 | HIS A | 61 | 44.197 | 45.175 | 55.285 | 1.00 | 43.44 | C |
| ATOM | 487 | NE2 | HIS A | 61 | 43.612 | 46.281 | 55.706 | 1.00 | 44.01 | N |
| ATOM | 488 | N   | ASP A | 62 | 43.820 | 43.418 | 61.729 | 1.00 | 40.04 | N |
| ATOM | 489 | CA  | ASP A | 62 | 44.305 | 42.884 | 63.004 | 1.00 | 40.57 | C |
| ATOM | 490 | C   | ASP A | 62 | 43.541 | 41.699 | 63.580 | 1.00 | 39.72 | C |
| ATOM | 491 | O   | ASP A | 62 | 44.100 | 40.905 | 64.336 | 1.00 | 40.13 | O |
| ATOM | 492 | CB  | ASP A | 62 | 44.348 | 43.989 | 64.063 | 1.00 | 41.31 | C |
| ATOM | 493 | CG  | ASP A | 62 | 45.119 | 45.204 | 63.602 | 1.00 | 44.33 | C |
| ATOM | 494 | OD1 | ASP A | 62 | 46.138 | 45.030 | 62.900 | 1.00 | 46.74 | O |
| ATOM | 495 | OD2 | ASP A | 62 | 44.714 | 46.333 | 63.949 | 1.00 | 46.77 | O |
| ATOM | 496 | N   | LEU A | 63 | 42.264 | 41.580 | 63.243 | 1.00 | 39.11 | N |
| ATOM | 497 | CA  | LEU A | 63 | 41.463 | 40.482 | 63.771 | 1.00 | 37.99 | C |
| ATOM | 498 | C   | LEU A | 63 | 41.402 | 39.312 | 62.798 | 1.00 | 36.82 | C |
| ATOM | 499 | O   | LEU A | 63 | 41.601 | 39.481 | 61.598 | 1.00 | 36.79 | O |
| ATOM | 500 | CB  | LEU A | 63 | 40.050 | 40.979 | 64.092 | 1.00 | 36.76 | C |
| ATOM | 501 | CG  | LEU A | 63 | 39.991 | 42.213 | 65.002 | 1.00 | 37.07 | C |
| ATOM | 502 | CD1 | LEU A | 63 | 38.549 | 42.563 | 65.308 | 1.00 | 36.81 | C |
| ATOM | 503 | CD2 | LEU A | 63 | 40.747 | 41.943 | 66.295 | 1.00 | 36.33 | C |
| ATOM | 504 | N   | GLU A | 64 | 41.143 | 38.121 | 63.325 | 1.00 | 36.94 | N |
| ATOM | 505 | CA  | GLU A | 64 | 41.043 | 36.931 | 62.488 | 1.00 | 36.98 | C |
| ATOM | 506 | C   | GLU A | 64 | 39.919 | 37.192 | 61.482 | 1.00 | 35.70 | C |
| ATOM | 507 | O   | GLU A | 64 | 39.946 | 36.699 | 60.350 | 1.00 | 35.70 | O |
| ATOM | 508 | CB  | GLU A | 64 | 40.722 | 35.708 | 63.353 | 1.00 | 38.68 | C |
| ATOM | 509 | CG  | GLU A | 64 | 41.205 | 34.388 | 62.765 | 1.00 | 42.66 | C |
| ATOM | 510 | CD  | GLU A | 64 | 40.988 | 33.218 | 63.708 | 1.00 | 45.14 | C |
| ATOM | 511 | OE1 | GLU A | 64 | 41.314 | 33.356 | 64.907 | 1.00 | 46.95 | O |
| ATOM | 512 | OE2 | GLU A | 64 | 40.502 | 32.159 | 63.254 | 1.00 | 46.45 | O |
| ATOM | 513 | N   | TRP A | 65 | 38.934 | 37.973 | 61.920 | 1.00 | 33.14 | N |
| ATOM | 514 | CA  | TRP A | 65 | 37.794 | 38.371 | 61.099 | 1.00 | 31.20 | C |
| ATOM | 515 | C   | TRP A | 65 | 36.837 | 39.227 | 61.933 | 1.00 | 30.48 | C |
| ATOM | 516 | O   | TRP A | 65 | 36.819 | 39.144 | 63.163 | 1.00 | 29.50 | O |
| ATOM | 517 | CB  | TRP A | 65 | 37.079 | 37.141 | 60.517 | 1.00 | 29.64 | C |
| ATOM | 518 | CG  | TRP A | 65 | 36.059 | 36.471 | 61.396 | 1.00 | 29.96 | C |
| ATOM | 519 | CD1 | TRP A | 65 | 34.725 | 36.774 | 61.489 | 1.00 | 29.04 | C |

| ATOM | 520 | CD2 | TRP | A | 65 | 36.271 | 35.332 | 62.237 | 1.00 | 29.18 | C |
|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 521 | NE1 | TRP | A | 65 | 34.096 | 35.884 | 62.328 | 1.00 | 28.93 | N |
| ATOM | 522 | CE2 | TRP | A | 65 | 35.020 | 34.990 | 62.801 | 1.00 | 28.49 | C |
| ATOM | 523 | CE3 | TRP | A | 65 | 37.397 | 34.563 | 62.567 | 1.00 | 30.69 | C |
| ATOM | 524 | CZ2 | TRP | A | 65 | 34.864 | 33.911 | 63.673 | 1.00 | 28.87 | C |
| ATOM | 525 | CZ3 | TRP | A | 65 | 37.241 | 33.487 | 63.439 | 1.00 | 28.73 | C |
| ATOM | 526 | CH2 | TRP | A | 65 | 35.982 | 33.173 | 63.980 | 1.00 | 30.02 | C |
| ATOM | 527 | N | VAL | A | 66 | 36.063 | 40.065 | 61.254 | 1.00 | 29.08 | N |
| ATOM | 528 | CA | VAL | A | 66 | 35.115 | 40.957 | 61.911 | 1.00 | 27.07 | C |
| ATOM | 529 | C | VAL | A | 66 | 33.692 | 40.493 | 61.630 | 1.00 | 27.30 | C |
| ATOM | 530 | O | VAL | A | 66 | 33.286 | 40.379 | 60.469 | 1.00 | 26.53 | O |
| ATOM | 531 | CB | VAL | A | 66 | 35.275 | 42.396 | 61.386 | 1.00 | 26.78 | C |
| ATOM | 532 | CG1 | VAL | A | 66 | 34.258 | 43.311 | 62.037 | 1.00 | 25.11 | C |
| ATOM | 533 | CG2 | VAL | A | 66 | 36.688 | 42.881 | 61.641 | 1.00 | 25.36 | C |
| ATOM | 534 | N | ASN | A | 67 | 32.940 | 40.198 | 62.683 | 1.00 | 25.22 | N |
| ATOM | 535 | CA | ASN | A | 67 | 31.567 | 39.765 | 62.486 | 1.00 | 25.50 | C |
| ATOM | 536 | C | ASN | A | 67 | 30.609 | 40.746 | 63.147 | 1.00 | 24.53 | C |
| ATOM | 537 | O | ASN | A | 67 | 30.986 | 41.472 | 64.065 | 1.00 | 25.06 | O |
| ATOM | 538 | CB | ASN | A | 67 | 31.352 | 38.332 | 63.008 | 1.00 | 23.06 | C |
| ATOM | 539 | CG | ASN | A | 67 | 31.634 | 38.183 | 64.495 | 1.00 | 25.11 | C |
| ATOM | 540 | OD1 | ASN | A | 67 | 32.023 | 39.133 | 65.179 | 1.00 | 24.75 | O |
| ATOM | 541 | ND2 | ASN | A | 67 | 31.432 | 36.971 | 65.005 | 1.00 | 22.84 | N |
| ATOM | 542 | N | ALA | A | 68 | 29.376 | 40.786 | 62.660 | 1.00 | 22.79 | N |
| ATOM | 543 | CA | ALA | A | 68 | 28.391 | 41.699 | 63.204 | 1.00 | 20.46 | C |
| ATOM | 544 | C | ALA | A | 68 | 27.004 | 41.129 | 63.051 | 1.00 | 19.93 | C |
| ATOM | 545 | O | ALA | A | 68 | 26.813 | 40.121 | 62.367 | 1.00 | 20.22 | O |
| ATOM | 546 | CB | ALA | A | 68 | 28.480 | 43.043 | 62.491 | 1.00 | 20.75 | C |
| ATOM | 547 | N | LEU | A | 69 | 26.045 | 41.787 | 63.697 | 1.00 | 18.77 | N |
| ATOM | 548 | CA | LEU | A | 69 | 24.643 | 41.396 | 63.649 | 1.00 | 18.16 | C |
| ATOM | 549 | C | LEU | A | 69 | 23.831 | 42.615 | 63.198 | 1.00 | 18.70 | C |
| ATOM | 550 | O | LEU | A | 69 | 24.134 | 43.746 | 63.576 | 1.00 | 19.36 | O |
| ATOM | 551 | CB | LEU | A | 69 | 24.173 | 40.938 | 65.038 | 1.00 | 17.74 | C |
| ATOM | 552 | CG | LEU | A | 69 | 24.847 | 39.706 | 65.665 | 1.00 | 18.55 | C |
| ATOM | 553 | CD1 | LEU | A | 69 | 24.381 | 39.551 | 67.109 | 1.00 | 15.25 | C |
| ATOM | 554 | CD2 | LEU | A | 69 | 24.521 | 38.447 | 64.858 | 1.00 | 16.47 | C |
| ATOM | 555 | N | GLY | A | 70 | 22.804 | 42.389 | 62.386 | 1.00 | 19.28 | N |
| ATOM | 556 | CA | GLY | A | 70 | 21.993 | 43.498 | 61.922 | 1.00 | 17.70 | C |
| ATOM | 557 | C | GLY | A | 70 | 21.289 | 44.176 | 63.080 | 1.00 | 18.86 | C |
| ATOM | 558 | O | GLY | A | 70 | 20.738 | 43.508 | 63.949 | 1.00 | 19.28 | O |
| ATOM | 559 | N | ALA | A | 71 | 21.316 | 45.504 | 63.095 | 1.00 | 18.56 | N |
| ATOM | 560 | CA | ALA | A | 71 | 20.675 | 46.289 | 64.143 | 1.00 | 17.23 | C |
| ATOM | 561 | C | ALA | A | 71 | 19.740 | 47.310 | 63.498 | 1.00 | 18.49 | C |
| ATOM | 562 | O | ALA | A | 71 | 20.131 | 47.989 | 62.537 | 1.00 | 16.80 | O |
| ATOM | 563 | CB | ALA | A | 71 | 21.727 | 47.002 | 64.974 | 1.00 | 15.96 | C |
| ATOM | 564 | N | LEU | A | 72 | 18.516 | 47.420 | 64.016 | 1.00 | 16.84 | N |
| ATOM | 565 | CA | LEU | A | 72 | 17.553 | 48.372 | 63.466 | 1.00 | 18.15 | C |
| ATOM | 566 | C | LEU | A | 72 | 17.146 | 49.480 | 64.449 | 1.00 | 17.87 | C |
| ATOM | 567 | O | LEU | A | 72 | 16.360 | 50.352 | 64.097 | 1.00 | 17.72 | O |
| ATOM | 568 | CB | LEU | A | 72 | 16.300 | 47.643 | 62.949 | 1.00 | 17.71 | C |
| ATOM | 569 | CG | LEU | A | 72 | 15.503 | 46.817 | 63.956 | 1.00 | 16.98 | C |
| ATOM | 570 | CD1 | LEU | A | 72 | 14.047 | 47.237 | 63.914 | 1.00 | 19.35 | C |
| ATOM | 571 | CD2 | LEU | A | 72 | 15.657 | 45.334 | 63.651 | 1.00 | 16.93 | C |
| ATOM | 572 | N | THR | A | 73 | 17.647 | 49.427 | 65.683 | 1.00 | 16.69 | N |
| ATOM | 573 | CA | THR | A | 73 | 17.369 | 50.482 | 66.668 | 1.00 | 16.19 | C |
| ATOM | 574 | C | THR | A | 73 | 18.663 | 50.797 | 67.422 | 1.00 | 16.39 | C |
| ATOM | 575 | O | THR | A | 73 | 19.609 | 50.003 | 67.419 | 1.00 | 12.86 | O |
| ATOM | 576 | CB | THR | A | 73 | 16.287 | 50.097 | 67.723 | 1.00 | 15.96 | C |
| ATOM | 577 | OG1 | THR | A | 73 | 16.886 | 49.352 | 68.792 | 1.00 | 16.02 | O |
| ATOM | 578 | CG2 | THR | A | 73 | 15.175 | 49.281 | 67.083 | 1.00 | 17.88 | C |
| ATOM | 579 | N | GLY | A | 74 | 18.700 | 51.961 | 68.064 | 1.00 | 16.81 | N |
| ATOM | 580 | CA | GLY | A | 74 | 19.881 | 52.353 | 68.806 | 1.00 | 16.34 | C |
| ATOM | 581 | C | GLY | A | 74 | 20.245 | 51.369 | 69.899 | 1.00 | 17.30 | C |
| ATOM | 582 | O | GLY | A | 74 | 21.391 | 50.928 | 69.977 | 1.00 | 20.22 | O |
| ATOM | 583 | N | ASN | A | 75 | 19.285 | 51.028 | 70.753 | 1.00 | 14.63 | N |
| ATOM | 584 | CA | ASN | A | 75 | 19.548 | 50.086 | 71.837 | 1.00 | 16.31 | C |
| ATOM | 585 | C | ASN | A | 75 | 20.112 | 48.764 | 71.315 | 1.00 | 17.42 | C |
| ATOM | 586 | O | ASN | A | 75 | 20.961 | 48.146 | 71.959 | 1.00 | 17.58 | O |
| ATOM | 587 | CB | ASN | A | 75 | 18.272 | 49.799 | 72.629 | 1.00 | 14.30 | C |
| ATOM | 588 | CG | ASN | A | 75 | 17.765 | 51.002 | 73.381 | 1.00 | 15.71 | C |
| ATOM | 589 | OD1 | ASN | A | 75 | 18.285 | 52.114 | 73.242 | 1.00 | 18.05 | O |
| ATOM | 590 | ND2 | ASN | A | 75 | 16.737 | 50.791 | 74.186 | 1.00 | 15.22 | N |
| ATOM | 591 | N | MET | A | 76 | 19.630 | 48.323 | 70.157 | 1.00 | 17.78 | N |
| ATOM | 592 | CA | MET | A | 76 | 20.115 | 47.076 | 69.587 | 1.00 | 18.03 | C |
| ATOM | 593 | C | MET | A | 76 | 21.626 | 47.115 | 69.455 | 1.00 | 18.41 | C |
| ATOM | 594 | O | MET | A | 76 | 22.321 | 46.211 | 69.922 | 1.00 | 19.16 | O |
| ATOM | 595 | CB | MET | A | 76 | 19.485 | 46.814 | 68.214 | 1.00 | 15.75 | C |
| ATOM | 596 | CG | MET | A | 76 | 18.245 | 45.955 | 68.286 | 1.00 | 16.41 | C |
| ATOM | 597 | SD | MET | A | 76 | 17.762 | 45.233 | 66.708 | 1.00 | 17.11 | S |
| ATOM | 598 | CE | MET | A | 76 | 15.994 | 44.970 | 67.019 | 1.00 | 15.38 | C |
| ATOM | 599 | N | ALA | A | 77 | 22.127 | 48.168 | 68.821 | 1.00 | 17.51 | N |

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|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 600 | CA  | ALA | A | 77 | 23.557 | 48.324 | 68.617 | 1.00 | 17.87 | C |
| ATOM | 601 | C   | ALA | A | 77 | 24.301 | 48.383 | 69.946 | 1.00 | 17.86 | C |
| ATOM | 602 | O   | ALA | A | 77 | 25.396 | 47.837 | 70.069 | 1.00 | 18.02 | O |
| ATOM | 603 | CB  | ALA | A | 77 | 23.836 | 49.578 | 67.799 | 1.00 | 15.13 | C |
| ATOM | 604 | N   | VAL | A | 78 | 23.705 | 49.043 | 70.936 | 1.00 | 17.39 | N |
| ATOM | 605 | CA  | VAL | A | 78 | 24.326 | 49.163 | 72.249 | 1.00 | 16.87 | C |
| ATOM | 606 | C   | VAL | A | 78 | 24.558 | 47.790 | 72.873 | 1.00 | 19.27 | C |
| ATOM | 607 | O   | VAL | A | 78 | 25.632 | 47.513 | 73.413 | 1.00 | 20.83 | O |
| ATOM | 608 | CB  | VAL | A | 78 | 23.459 | 50.009 | 73.208 | 1.00 | 17.24 | C |
| ATOM | 609 | CG1 | VAL | A | 78 | 23.964 | 49.868 | 74.642 | 1.00 | 14.76 | C |
| ATOM | 610 | CG2 | VAL | A | 78 | 23.503 | 51.473 | 72.783 | 1.00 | 15.79 | C |
| ATOM | 611 | N   | GLN | A | 79 | 23.551 | 46.930 | 72.796 | 1.00 | 18.47 | N |
| ATOM | 612 | CA  | GLN | A | 79 | 23.667 | 45.595 | 73.356 | 1.00 | 19.44 | C |
| ATOM | 613 | C   | GLN | A | 79 | 24.716 | 44.788 | 72.604 | 1.00 | 19.49 | C |
| ATOM | 614 | O   | GLN | A | 79 | 25.471 | 44.034 | 73.208 | 1.00 | 20.37 | O |
| ATOM | 615 | CB  | GLN | A | 79 | 22.315 | 44.880 | 73.312 | 1.00 | 17.80 | C |
| ATOM | 616 | CG  | GLN | A | 79 | 21.264 | 45.516 | 74.208 | 1.00 | 16.37 | C |
| ATOM | 617 | CD  | GLN | A | 79 | 21.763 | 45.746 | 75.628 | 1.00 | 18.81 | C |
| ATOM | 618 | OE1 | GLN | A | 79 | 22.607 | 45.000 | 76.129 | 1.00 | 19.19 | O |
| ATOM | 619 | NE2 | GLN | A | 79 | 21.230 | 46.774 | 76.289 | 1.00 | 14.36 | N |
| ATOM | 620 | N   | GLN | A | 80 | 24.767 | 44.956 | 71.285 | 1.00 | 20.51 | N |
| ATOM | 621 | CA  | GLN | A | 80 | 25.734 | 44.242 | 70.461 | 1.00 | 20.08 | C |
| ATOM | 622 | C   | GLN | A | 80 | 27.163 | 44.585 | 70.882 | 1.00 | 22.09 | C |
| ATOM | 623 | O   | GLN | A | 80 | 28.013 | 43.696 | 70.984 | 1.00 | 22.63 | O |
| ATOM | 624 | CB  | GLN | A | 80 | 25.496 | 44.564 | 68.980 | 1.00 | 20.30 | C |
| ATOM | 625 | CG  | GLN | A | 80 | 24.239 | 43.885 | 68.418 | 1.00 | 18.26 | C |
| ATOM | 626 | CD  | GLN | A | 80 | 23.815 | 44.410 | 67.060 | 1.00 | 17.33 | C |
| ATOM | 627 | OE1 | GLN | A | 80 | 24.505 | 45.224 | 66.444 | 1.00 | 17.82 | O |
| ATOM | 628 | NE2 | GLN | A | 80 | 22.669 | 43.941 | 66.583 | 1.00 | 17.01 | N |
| ATOM | 629 | N   | VAL | A | 81 | 27.422 | 45.866 | 71.140 | 1.00 | 22.26 | N |
| ATOM | 630 | CA  | VAL | A | 81 | 28.744 | 46.305 | 71.579 | 1.00 | 22.29 | C |
| ATOM | 631 | C   | VAL | A | 81 | 28.999 | 45.854 | 73.020 | 1.00 | 23.52 | C |
| ATOM | 632 | O   | VAL | A | 81 | 30.098 | 45.400 | 73.347 | 1.00 | 25.17 | O |
| ATOM | 633 | CB  | VAL | A | 81 | 28.898 | 47.849 | 71.519 | 1.00 | 20.51 | C |
| ATOM | 634 | CG1 | VAL | A | 81 | 30.206 | 48.267 | 72.187 | 1.00 | 20.93 | C |
| ATOM | 635 | CG2 | VAL | A | 81 | 28.888 | 48.323 | 70.080 | 1.00 | 17.81 | C |
| ATOM | 636 | N   | ARG | A | 82 | 27.988 | 45.995 | 73.876 | 1.00 | 23.83 | N |
| ATOM | 637 | CA  | ARG | A | 82 | 28.088 | 45.590 | 75.279 | 1.00 | 23.77 | C |
| ATOM | 638 | C   | ARG | A | 82 | 28.439 | 44.104 | 75.377 | 1.00 | 24.41 | C |
| ATOM | 639 | O   | ARG | A | 82 | 29.124 | 43.685 | 76.309 | 1.00 | 24.34 | O |
| ATOM | 640 | CB  | ARG | A | 82 | 26.757 | 45.846 | 76.007 | 1.00 | 23.48 | C |
| ATOM | 641 | CG  | ARG | A | 82 | 26.655 | 45.231 | 77.416 | 1.00 | 23.29 | C |
| ATOM | 642 | CD  | ARG | A | 82 | 27.528 | 45.962 | 78.434 | 1.00 | 25.63 | C |
| ATOM | 643 | NE  | ARG | A | 82 | 26.946 | 47.243 | 78.829 | 1.00 | 28.41 | N |
| ATOM | 644 | CZ  | ARG | A | 82 | 27.544 | 48.137 | 79.611 | 1.00 | 28.97 | C |
| ATOM | 645 | NH1 | ARG | A | 82 | 28.759 | 47.902 | 80.095 | 1.00 | 28.10 | N |
| ATOM | 646 | NH2 | ARG | A | 82 | 26.922 | 49.270 | 79.914 | 1.00 | 27.24 | N |
| ATOM | 647 | N   | ALA | A | 83 | 27.960 | 43.318 | 74.414 | 1.00 | 23.38 | N |
| ATOM | 648 | CA  | ALA | A | 83 | 28.214 | 41.877 | 74.386 | 1.00 | 24.54 | C |
| ATOM | 649 | C   | ALA | A | 83 | 29.577 | 41.506 | 73.807 | 1.00 | 23.02 | C |
| ATOM | 650 | O   | ALA | A | 83 | 29.951 | 40.342 | 73.803 | 1.00 | 24.48 | O |
| ATOM | 651 | CB  | ALA | A | 83 | 27.116 | 41.166 | 73.609 | 1.00 | 24.15 | C |
| ATOM | 652 | N   | GLY | A | 84 | 30.313 | 42.486 | 73.301 | 1.00 | 24.92 | N |
| ATOM | 653 | CA  | GLY | A | 84 | 31.631 | 42.192 | 72.769 | 1.00 | 24.71 | C |
| ATOM | 654 | C   | GLY | A | 84 | 31.845 | 42.374 | 71.280 | 1.00 | 26.51 | C |
| ATOM | 655 | O   | GLY | A | 84 | 32.987 | 42.358 | 70.821 | 1.00 | 26.33 | O |
| ATOM | 656 | N   | LEU | A | 85 | 30.769 | 42.546 | 70.517 | 1.00 | 25.72 | N |
| ATOM | 657 | CA  | LEU | A | 85 | 30.910 | 42.718 | 69.075 | 1.00 | 24.93 | C |
| ATOM | 658 | C   | LEU | A | 85 | 31.622 | 44.030 | 68.774 | 1.00 | 24.09 | C |
| ATOM | 659 | O   | LEU | A | 85 | 31.417 | 45.029 | 69.460 | 1.00 | 23.52 | O |
| ATOM | 660 | CB  | LEU | A | 85 | 29.535 | 42.667 | 68.398 | 1.00 | 23.75 | C |
| ATOM | 661 | CG  | LEU | A | 85 | 28.754 | 41.373 | 68.656 | 1.00 | 21.51 | C |
| ATOM | 662 | CD1 | LEU | A | 85 | 27.554 | 41.317 | 67.735 | 1.00 | 21.61 | C |
| ATOM | 663 | CD2 | LEU | A | 85 | 29.643 | 40.163 | 68.419 | 1.00 | 21.43 | C |
| ATOM | 664 | N   | LYS | A | 86 | 32.462 | 44.026 | 67.748 | 1.00 | 24.84 | N |
| ATOM | 665 | CA  | LYS | A | 86 | 33.223 | 45.217 | 67.406 | 1.00 | 26.49 | C |
| ATOM | 666 | C   | LYS | A | 86 | 32.799 | 45.918 | 66.123 | 1.00 | 26.79 | C |
| ATOM | 667 | O   | LYS | A | 86 | 33.514 | 46.778 | 65.609 | 1.00 | 28.34 | O |
| ATOM | 668 | CB  | LYS | A | 86 | 34.709 | 44.870 | 67.356 | 1.00 | 28.60 | C |
| ATOM | 669 | CG  | LYS | A | 86 | 35.246 | 44.426 | 68.702 | 1.00 | 32.94 | C |
| ATOM | 670 | CD  | LYS | A | 86 | 36.739 | 44.177 | 68.664 | 1.00 | 36.54 | C |
| ATOM | 671 | CE  | LYS | A | 86 | 37.259 | 43.790 | 70.046 | 1.00 | 38.57 | C |
| ATOM | 672 | NZ  | LYS | A | 86 | 38.704 | 43.440 | 70.012 | 1.00 | 40.54 | N |
| ATOM | 673 | N   | ALA | A | 87 | 31.633 | 45.555 | 65.608 | 1.00 | 25.39 | N |
| ATOM | 674 | CA  | ALA | A | 87 | 31.117 | 46.177 | 64.397 | 1.00 | 24.65 | C |
| ATOM | 675 | C   | ALA | A | 87 | 29.598 | 46.086 | 64.396 | 1.00 | 22.95 | C |
| ATOM | 676 | O   | ALA | A | 87 | 29.021 | 45.197 | 65.018 | 1.00 | 21.53 | O |
| ATOM | 677 | CB  | ALA | A | 87 | 31.692 | 45.488 | 63.157 | 1.00 | 23.79 | C |
| ATOM | 678 | N   | ILE | A | 88 | 28.951 | 47.019 | 63.712 | 1.00 | 21.55 | N |
| ATOM | 679 | CA  | ILE | A | 88 | 27.498 | 47.011 | 63.636 | 1.00 | 20.75 | C |

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|------|-----|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 680 | C | ILE | A | 88 | 27.041 | 46.918 | 62.193 | 1.00 | 19.26 | C |
| ATOM | 681 | O | ILE | A | 88 | 27.508 | 47.667 | 61.343 | 1.00 | 20.68 | O |
| ATOM | 682 | CB | ILE | A | 88 | 26.907 | 48.285 | 64.267 | 1.00 | 20.65 | C |
| ATOM | 683 | CG1 | ILE | A | 88 | 27.231 | 48.313 | 65.760 | 1.00 | 21.70 | C |
| ATOM | 684 | CG2 | ILE | A | 88 | 25.404 | 48.324 | 64.061 | 1.00 | 19.15 | C |
| ATOM | 685 | CD1 | ILE | A | 88 | 26.884 | 49.601 | 66.415 | 1.00 | 25.50 | C |
| ATOM | 686 | N | TYR | A | 89 | 26.141 | 45.986 | 61.908 | 1.00 | 19.60 | N |
| ATOM | 687 | CA | TYR | A | 89 | 25.635 | 45.864 | 60.549 | 1.00 | 19.68 | C |
| ATOM | 688 | C | TYR | A | 89 | 24.253 | 46.497 | 60.463 | 1.00 | 18.11 | C |
| ATOM | 689 | O | TYR | A | 89 | 23.356 | 46.158 | 61.232 | 1.00 | 16.50 | O |
| ATOM | 690 | CB | TYR | A | 89 | 25.550 | 44.400 | 60.100 | 1.00 | 20.23 | C |
| ATOM | 691 | CG | TYR | A | 89 | 25.021 | 44.298 | 58.693 | 1.00 | 18.39 | C |
| ATOM | 692 | CD1 | TYR | A | 89 | 25.736 | 44.838 | 57.620 | 1.00 | 19.48 | C |
| ATOM | 693 | CD2 | TYR | A | 89 | 23.757 | 43.781 | 58.445 | 1.00 | 19.34 | C |
| ATOM | 694 | CE1 | TYR | A | 89 | 25.198 | 44.878 | 56.340 | 1.00 | 16.73 | C |
| ATOM | 695 | CE2 | TYR | A | 89 | 23.207 | 43.812 | 57.169 | 1.00 | 20.77 | C |
| ATOM | 696 | CZ | TYR | A | 89 | 23.933 | 44.368 | 56.124 | 1.00 | 19.42 | C |
| ATOM | 697 | OH | TYR | A | 89 | 23.369 | 44.442 | 54.879 | 1.00 | 19.29 | O |
| ATOM | 698 | N | LEU | A | 90 | 24.092 | 47.419 | 59.521 | 1.00 | 18.07 | N |
| ATOM | 699 | CA | LEU | A | 90 | 22.824 | 48.117 | 59.337 | 1.00 | 18.70 | C |
| ATOM | 700 | C | LEU | A | 90 | 22.139 | 47.595 | 58.075 | 1.00 | 19.20 | C |
| ATOM | 701 | O | LEU | A | 90 | 22.462 | 47.996 | 56.956 | 1.00 | 18.96 | O |
| ATOM | 702 | CB | LEU | A | 90 | 23.079 | 49.624 | 59.255 | 1.00 | 18.04 | C |
| ATOM | 703 | CG | LEU | A | 90 | 21.942 | 50.639 | 59.062 | 1.00 | 19.94 | C |
| ATOM | 704 | CD1 | LEU | A | 90 | 20.571 | 50.022 | 59.288 | 1.00 | 21.28 | C |
| ATOM | 705 | CD2 | LEU | A | 90 | 22.178 | 51.792 | 60.013 | 1.00 | 17.58 | C |
| ATOM | 706 | N | SER | A | 91 | 21.198 | 46.682 | 58.286 | 1.00 | 17.44 | N |
| ATOM | 707 | CA | SER | A | 91 | 20.447 | 46.041 | 57.215 | 1.00 | 17.54 | C |
| ATOM | 708 | C | SER | A | 91 | 19.369 | 46.922 | 56.592 | 1.00 | 16.06 | C |
| ATOM | 709 | O | SER | A | 91 | 18.575 | 47.533 | 57.302 | 1.00 | 14.49 | O |
| ATOM | 710 | CB | SER | A | 91 | 19.806 | 44.757 | 57.752 | 1.00 | 16.74 | C |
| ATOM | 711 | OG | SER | A | 91 | 18.784 | 44.297 | 56.890 | 1.00 | 18.73 | O |
| ATOM | 712 | N | GLY | A | 92 | 19.356 | 46.982 | 55.262 | 1.00 | 15.59 | N |
| ATOM | 713 | CA | GLY | A | 92 | 18.352 | 47.757 | 54.556 | 1.00 | 15.57 | C |
| ATOM | 714 | C | GLY | A | 92 | 17.035 | 46.996 | 54.581 | 1.00 | 16.39 | C |
| ATOM | 715 | O | GLY | A | 92 | 15.963 | 47.591 | 54.511 | 1.00 | 18.10 | O |
| ATOM | 716 | N | TRP | A | 93 | 17.130 | 45.672 | 54.674 | 1.00 | 16.47 | N |
| ATOM | 717 | CA | TRP | A | 93 | 15.968 | 44.789 | 54.749 | 1.00 | 14.65 | C |
| ATOM | 718 | C | TRP | A | 93 | 15.199 | 45.138 | 56.032 | 1.00 | 15.35 | C |
| ATOM | 719 | O | TRP | A | 93 | 13.990 | 45.377 | 55.998 | 1.00 | 12.98 | O |
| ATOM | 720 | CB | TRP | A | 93 | 16.437 | 43.318 | 54.806 | 1.00 | 15.80 | C |
| ATOM | 721 | CG | TRP | A | 93 | 15.340 | 42.281 | 54.696 | 1.00 | 14.51 | C |
| ATOM | 722 | CD1 | TRP | A | 93 | 15.082 | 41.480 | 53.625 | 1.00 | 14.79 | C |
| ATOM | 723 | CD2 | TRP | A | 93 | 14.344 | 41.964 | 55.680 | 1.00 | 14.17 | C |
| ATOM | 724 | NE1 | TRP | A | 93 | 13.991 | 40.687 | 53.873 | 1.00 | 14.43 | N |
| ATOM | 725 | CE2 | TRP | A | 93 | 13.517 | 40.963 | 55.128 | 1.00 | 16.12 | C |
| ATOM | 726 | CE3 | TRP | A | 93 | 14.070 | 42.428 | 56.971 | 1.00 | 15.55 | C |
| ATOM | 727 | CZ2 | TRP | A | 93 | 12.430 | 40.416 | 55.823 | 1.00 | 15.96 | C |
| ATOM | 728 | CZ3 | TRP | A | 93 | 12.983 | 41.882 | 57.665 | 1.00 | 16.53 | C |
| ATOM | 729 | CH2 | TRP | A | 93 | 12.179 | 40.887 | 57.085 | 1.00 | 15.69 | C |
| ATOM | 730 | N | GLN | A | 94 | 15.911 | 45.168 | 57.161 | 1.00 | 14.98 | N |
| ATOM | 731 | CA | GLN | A | 94 | 15.292 | 45.473 | 58.455 | 1.00 | 15.38 | C |
| ATOM | 732 | C | GLN | A | 94 | 14.670 | 46.866 | 58.469 | 1.00 | 14.61 | C |
| ATOM | 733 | O | GLN | A | 94 | 13.617 | 47.081 | 59.079 | 1.00 | 14.36 | O |
| ATOM | 734 | CB | GLN | A | 94 | 16.317 | 45.349 | 59.593 | 1.00 | 14.76 | C |
| ATOM | 735 | CG | GLN | A | 94 | 16.971 | 43.971 | 59.704 | 1.00 | 15.41 | C |
| ATOM | 736 | CD | GLN | A | 94 | 17.831 | 43.799 | 60.965 | 1.00 | 17.54 | C |
| ATOM | 737 | OE1 | GLN | A | 94 | 18.605 | 44.690 | 61.350 | 1.00 | 16.74 | O |
| ATOM | 738 | NE2 | GLN | A | 94 | 17.707 | 42.639 | 61.599 | 1.00 | 15.23 | N |
| ATOM | 739 | N | VAL | A | 95 | 15.326 | 47.810 | 57.798 | 1.00 | 13.35 | N |
| ATOM | 740 | CA | VAL | A | 95 | 14.840 | 49.184 | 57.716 | 1.00 | 13.95 | C |
| ATOM | 741 | C | VAL | A | 95 | 13.517 | 49.204 | 56.944 | 1.00 | 15.54 | C |
| ATOM | 742 | O | VAL | A | 95 | 12.583 | 49.910 | 57.312 | 1.00 | 17.56 | O |
| ATOM | 743 | CB | VAL | A | 95 | 15.891 | 50.086 | 57.020 | 1.00 | 14.26 | C |
| ATOM | 744 | CG1 | VAL | A | 95 | 15.250 | 51.357 | 56.499 | 1.00 | 14.46 | C |
| ATOM | 745 | CG2 | VAL | A | 95 | 17.003 | 50.425 | 58.002 | 1.00 | 11.41 | C |
| ATOM | 746 | N | ALA | A | 96 | 13.448 | 48.424 | 55.868 | 1.00 | 15.36 | N |
| ATOM | 747 | CA | ALA | A | 96 | 12.234 | 48.335 | 55.072 | 1.00 | 14.49 | C |
| ATOM | 748 | C | ALA | A | 96 | 11.133 | 47.679 | 55.906 | 1.00 | 14.56 | C |
| ATOM | 749 | O | ALA | A | 96 | 9.974 | 48.094 | 55.883 | 1.00 | 15.54 | O |
| ATOM | 750 | CB | ALA | A | 96 | 12.492 | 47.509 | 53.832 | 1.00 | 12.18 | C |
| ATOM | 751 | N | GLY | A | 97 | 11.508 | 46.655 | 56.657 | 1.00 | 13.90 | N |
| ATOM | 752 | CA | GLY | A | 97 | 10.531 | 45.948 | 57.455 | 1.00 | 13.72 | C |
| ATOM | 753 | C | GLY | A | 97 | 10.023 | 46.623 | 58.712 | 1.00 | 14.49 | C |
| ATOM | 754 | O | GLY | A | 97 | 8.841 | 46.486 | 59.035 | 1.00 | 14.03 | O |
| ATOM | 755 | N | ASP | A | 98 | 10.876 | 47.371 | 59.411 | 1.00 | 12.90 | N |
| ATOM | 756 | CA | ASP | A | 98 | 10.441 | 47.974 | 60.664 | 1.00 | 12.95 | C |
| ATOM | 757 | C | ASP | A | 98 | 11.106 | 49.287 | 61.093 | 1.00 | 14.77 | C |
| ATOM | 758 | O | ASP | A | 98 | 10.936 | 49.712 | 62.237 | 1.00 | 14.36 | O |
| ATOM | 759 | CB | ASP | A | 98 | 10.629 | 46.924 | 61.763 | 1.00 | 13.49 | C |

| ATOM | 760 | CG | ASP A | 98 | 9.732 | 47.141 | 62.952 | 1.00 12.45 | C |
|------|-----|-----|-------|-----|-------|--------|--------|------------|---|
| ATOM | 761 | OD1 | ASP A | 98 | 8.658 | 47.761 | 62.810 | 1.00 12.35 | O |
| ATOM | 762 | OD2 | ASP A | 98 | 10.097 | 46.659 | 64.039 | 1.00 15.71 | O |
| ATOM | 763 | N | ALA A | 99 | 11.838 | 49.951 | 60.201 | 1.00 14.73 | N |
| ATOM | 764 | CA | ALA A | 99 | 12.509 | 51.186 | 60.603 | 1.00 14.91 | C |
| ATOM | 765 | C | ALA A | 99 | 12.815 | 52.180 | 59.488 | 1.00 16.00 | C |
| ATOM | 766 | O | ALA A | 99 | 13.953 | 52.648 | 59.374 | 1.00 17.42 | O |
| ATOM | 767 | CB | ALA A | 99 | 13.816 | 50.838 | 61.346 | 1.00 12.23 | C |
| ATOM | 768 | N | ASN A | 100 | 11.828 | 52.514 | 58.661 | 1.00 15.81 | N |
| ATOM | 769 | CA | ASN A | 100 | 12.090 | 53.473 | 57.596 | 1.00 16.10 | C |
| ATOM | 770 | C | ASN A | 100 | 11.207 | 54.714 | 57.715 | 1.00 17.17 | C |
| ATOM | 771 | O | ASN A | 100 | 10.155 | 54.697 | 58.366 | 1.00 15.67 | O |
| ATOM | 772 | CB | ASN A | 100 | 11.946 | 52.817 | 56.216 | 1.00 15.66 | C |
| ATOM | 773 | CG | ASN A | 100 | 10.513 | 52.455 | 55.879 | 1.00 17.52 | C |
| ATOM | 774 | OD1 | ASN A | 100 | 10.054 | 51.331 | 56.129 | 1.00 19.78 | O |
| ATOM | 775 | ND2 | ASN A | 100 | 9.797 | 53.407 | 55.306 | 1.00 13.67 | N |
| ATOM | 776 | N | LEU A | 101 | 11.642 | 55.792 | 57.075 | 1.00 16.02 | N |
| ATOM | 777 | CA | LEU A | 101 | 10.940 | 57.060 | 57.138 | 1.00 13.64 | C |
| ATOM | 778 | C | LEU A | 101 | 9.522 | 57.119 | 56.564 | 1.00 15.08 | C |
| ATOM | 779 | O | LEU A | 101 | 8.819 | 58.100 | 56.784 | 1.00 15.10 | O |
| ATOM | 780 | CB | LEU A | 101 | 11.819 | 58.148 | 56.508 | 1.00 13.38 | C |
| ATOM | 781 | CG | LEU A | 101 | 13.169 | 58.285 | 57.231 | 1.00 17.24 | C |
| ATOM | 782 | CD1 | LEU A | 101 | 14.122 | 59.184 | 56.460 | 1.00 15.84 | C |
| ATOM | 783 | CD2 | LEU A | 101 | 12.922 | 58.833 | 58.635 | 1.00 16.34 | C |
| ATOM | 784 | N | SER A | 102 | 9.074 | 56.095 | 55.844 | 1.00 14.31 | N |
| ATOM | 785 | CA | SER A | 102 | 7.709 | 56.158 | 55.313 | 1.00 14.98 | C |
| ATOM | 786 | C | SER A | 102 | 6.720 | 55.765 | 56.405 | 1.00 14.95 | C |
| ATOM | 787 | O | SER A | 102 | 5.531 | 56.065 | 56.318 | 1.00 14.27 | O |
| ATOM | 788 | CB | SER A | 102 | 7.520 | 55.203 | 54.141 | 1.00 10.85 | C |
| ATOM | 789 | OG | SER A | 102 | 7.319 | 53.888 | 54.625 | 1.00 12.29 | O |
| ATOM | 790 | N | GLY A | 103 | 7.225 | 55.080 | 57.425 | 1.00 16.42 | N |
| ATOM | 791 | CA | GLY A | 103 | 6.381 | 54.626 | 58.514 | 1.00 16.46 | C |
| ATOM | 792 | C | GLY A | 103 | 5.733 | 53.291 | 58.184 | 1.00 16.41 | C |
| ATOM | 793 | O | GLY A | 103 | 5.076 | 52.690 | 59.028 | 1.00 17.22 | O |
| ATOM | 794 | N | HIS A | 104 | 5.922 | 52.822 | 56.954 | 1.00 16.50 | N |
| ATOM | 795 | CA | HIS A | 104 | 5.337 | 51.558 | 56.514 | 1.00 16.29 | C |
| ATOM | 796 | C | HIS A | 104 | 6.253 | 50.340 | 56.589 | 1.00 15.89 | C |
| ATOM | 797 | O | HIS A | 104 | 7.479 | 50.459 | 56.674 | 1.00 15.01 | O |
| ATOM | 798 | CB | HIS A | 104 | 4.808 | 51.684 | 55.078 | 1.00 14.04 | C |
| ATOM | 799 | CG | HIS A | 104 | 3.547 | 52.482 | 54.970 | 1.00 17.32 | C |
| ATOM | 800 | ND1 | HIS A | 104 | 3.513 | 53.759 | 54.448 | 1.00 17.48 | N |
| ATOM | 801 | CD2 | HIS A | 104 | 2.277 | 52.193 | 55.339 | 1.00 15.12 | C |
| ATOM | 802 | CE1 | HIS A | 104 | 2.278 | 54.223 | 54.503 | 1.00 18.17 | C |
| ATOM | 803 | NE2 | HIS A | 104 | 1.508 | 53.292 | 55.039 | 1.00 20.87 | N |
| ATOM | 804 | N | THR A | 105 | 5.623 | 49.167 | 56.550 | 1.00 15.79 | N |
| ATOM | 805 | CA | THR A | 105 | 6.304 | 47.882 | 56.577 | 1.00 14.00 | C |
| ATOM | 806 | C | THR A | 105 | 6.435 | 47.478 | 55.113 | 1.00 15.81 | C |
| ATOM | 807 | O | THR A | 105 | 5.447 | 47.438 | 54.379 | 1.00 15.80 | O |
| ATOM | 808 | CB | THR A | 105 | 5.463 | 46.841 | 57.349 | 1.00 15.45 | C |
| ATOM | 809 | OG1 | THR A | 105 | 5.377 | 47.237 | 58.722 | 1.00 14.73 | O |
| ATOM | 810 | CG2 | THR A | 105 | 6.083 | 45.449 | 57.258 | 1.00 13.02 | C |
| ATOM | 811 | N | TYR A | 106 | 7.655 | 47.194 | 54.679 | 1.00 15.23 | N |
| ATOM | 812 | CA | TYR A | 106 | 7.871 | 46.832 | 53.286 | 1.00 15.72 | C |
| ATOM | 813 | C | TYR A | 106 | 8.760 | 45.624 | 53.073 | 1.00 16.13 | C |
| ATOM | 814 | O | TYR A | 106 | 9.589 | 45.288 | 53.918 | 1.00 14.74 | O |
| ATOM | 815 | CB | TYR A | 106 | 8.546 | 47.978 | 52.530 | 1.00 15.06 | C |
| ATOM | 816 | CG | TYR A | 106 | 7.742 | 49.247 | 52.334 | 1.00 15.55 | C |
| ATOM | 817 | CD1 | TYR A | 106 | 6.468 | 49.215 | 51.768 | 1.00 14.40 | C |
| ATOM | 818 | CD2 | TYR A | 106 | 8.306 | 50.491 | 52.622 | 1.00 13.32 | C |
| ATOM | 819 | CE1 | TYR A | 106 | 5.775 | 50.391 | 51.483 | 1.00 15.55 | C |
| ATOM | 820 | CE2 | TYR A | 106 | 7.631 | 51.675 | 52.345 | 1.00 15.02 | C |
| ATOM | 821 | CZ | TYR A | 106 | 6.364 | 51.619 | 51.775 | 1.00 16.59 | C |
| ATOM | 822 | OH | TYR A | 106 | 5.686 | 52.784 | 51.522 | 1.00 13.42 | O |
| ATOM | 823 | N | PRO A | 107 | 8.574 | 44.933 | 51.940 | 1.00 17.10 | N |
| ATOM | 824 | CA | PRO A | 107 | 9.432 | 43.781 | 51.665 | 1.00 15.72 | C |
| ATOM | 825 | C | PRO A | 107 | 10.732 | 44.466 | 51.194 | 1.00 17.40 | C |
| ATOM | 826 | O | PRO A | 107 | 10.735 | 45.677 | 50.943 | 1.00 15.66 | O |
| ATOM | 827 | CB | PRO A | 107 | 8.685 | 43.048 | 50.551 | 1.00 14.80 | C |
| ATOM | 828 | CG | PRO A | 107 | 7.930 | 44.142 | 49.854 | 1.00 16.20 | C |
| ATOM | 829 | CD | PRO A | 107 | 7.433 | 44.982 | 51.006 | 1.00 15.78 | C |
| ATOM | 830 | N | ASP A | 108 | 11.823 | 43.722 | 51.069 | 1.00 18.54 | N |
| ATOM | 831 | CA | ASP A | 108 | 13.109 | 44.313 | 50.684 | 1.00 18.99 | C |
| ATOM | 832 | C | ASP A | 108 | 13.279 | 44.629 | 49.189 | 1.00 19.73 | C |
| ATOM | 833 | O | ASP A | 108 | 14.031 | 43.957 | 48.480 | 1.00 18.46 | O |
| ATOM | 834 | CB | ASP A | 108 | 14.224 | 43.388 | 51.166 | 1.00 19.82 | C |
| ATOM | 835 | CG | ASP A | 108 | 15.586 | 43.998 | 51.015 | 1.00 22.92 | C |
| ATOM | 836 | OD1 | ASP A | 108 | 15.685 | 45.246 | 51.047 | 1.00 22.59 | O |
| ATOM | 837 | OD2 | ASP A | 108 | 16.556 | 43.225 | 50.875 | 1.00 24.01 | O |
| ATOM | 838 | N | GLN A | 109 | 12.608 | 45.685 | 48.724 | 1.00 20.06 | N |
| ATOM | 839 | CA | GLN A | 109 | 12.650 | 46.058 | 47.315 | 1.00 18.32 | C |

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ATOM    840  C    GLN A 109      12.863  47.560  47.048  1.00 19.95           C
ATOM    841  O    GLN A 109      12.285  48.121  46.109  1.00 18.00           O
ATOM    842  CB   GLN A 109      11.352  45.574  46.651  1.00 19.55           C
ATOM    843  CG   GLN A 109      11.130  44.058  46.789  1.00 21.32           C
ATOM    844  CD   GLN A 109       9.787  43.579  46.256  1.00 22.36           C
ATOM    845  OE1  GLN A 109       9.415  43.863  45.118  1.00 22.96           O
ATOM    846  NE2  GLN A 109       9.058  42.835  47.080  1.00 23.25           N
ATOM    847  N    SER A 110      13.699  48.203  47.865  1.00 18.95           N
ATOM    848  CA   SER A 110      13.977  49.633  47.714  1.00 18.00           C
ATOM    849  C    SER A 110      12.690  50.450  47.597  1.00 17.13           C
ATOM    850  O    SER A 110      12.576  51.329  46.736  1.00 16.65           O
ATOM    851  CB   SER A 110      14.846  49.889  46.472  1.00 19.09           C
ATOM    852  OG   SER A 110      16.128  49.298  46.593  1.00 18.97           O
ATOM    853  N    LEU A 111      11.729  50.173  48.471  1.00 15.76           N
ATOM    854  CA   LEU A 111      10.453  50.874  48.442  1.00 14.50           C
ATOM    855  C    LEU A 111      10.412  52.100  49.353  1.00 14.95           C
ATOM    856  O    LEU A 111       9.602  53.007  49.145  1.00 14.64           O
ATOM    857  CB   LEU A 111       9.320  49.915  48.833  1.00 14.88           C
ATOM    858  CG   LEU A 111       9.030  48.714  47.919  1.00 14.65           C
ATOM    859  CD1  LEU A 111       7.915  47.881  48.513  1.00 10.92           C
ATOM    860  CD2  LEU A 111       8.626  49.199  46.528  1.00 15.38           C
ATOM    861  N    TYR A 112      11.295  52.132  50.348  1.00 14.01           N
ATOM    862  CA   TYR A 112      11.331  53.226  51.314  1.00 14.63           C
ATOM    863  C    TYR A 112      12.122  54.461  50.862  1.00 14.37           C
ATOM    864  O    TYR A 112      12.932  54.381  49.935  1.00 16.18           O
ATOM    865  CB   TYR A 112      11.874  52.697  52.653  1.00 14.37           C
ATOM    866  CG   TYR A 112      13.300  52.162  52.609  1.00 15.70           C
ATOM    867  CD1  TYR A 112      14.390  53.028  52.504  1.00 14.12           C
ATOM    868  CD2  TYR A 112      13.555  50.791  52.701  1.00 14.60           C
ATOM    869  CE1  TYR A 112      15.707  52.543  52.495  1.00 15.29           C
ATOM    870  CE2  TYR A 112      14.864  50.295  52.691  1.00 16.83           C
ATOM    871  CZ   TYR A 112      15.933  51.180  52.588  1.00 15.94           C
ATOM    872  OH   TYR A 112      17.224  50.703  52.563  1.00 18.24           O
ATOM    873  N    PRO A 113      11.893  55.621  51.517  1.00 13.11           N
ATOM    874  CA   PRO A 113      12.577  56.885  51.195  1.00 13.51           C
ATOM    875  C    PRO A 113      14.091  56.701  51.320  1.00 12.39           C
ATOM    876  O    PRO A 113      14.562  56.215  52.339  1.00 11.47           O
ATOM    877  CB   PRO A 113      12.028  57.860  52.246  1.00 12.86           C
ATOM    878  CG   PRO A 113      10.696  57.305  52.579  1.00 14.13           C
ATOM    879  CD   PRO A 113      10.980  55.812  52.657  1.00 13.38           C
ATOM    880  N    ALA A 114      14.838  57.121  50.303  1.00 12.29           N
ATOM    881  CA   ALA A 114      16.297  56.947  50.262  1.00 13.41           C
ATOM    882  C    ALA A 114      17.158  57.458  51.421  1.00 14.50           C
ATOM    883  O    ALA A 114      18.313  57.049  51.560  1.00 16.33           O
ATOM    884  CB   ALA A 114      16.842  57.507  48.945  1.00 13.80           C
ATOM    885  N    ASN A 115      16.638  58.354  52.245  1.00 13.77           N
ATOM    886  CA   ASN A 115      17.444  58.842  53.356  1.00 15.12           C
ATOM    887  C    ASN A 115      17.163  58.067  54.652  1.00 13.91           C
ATOM    888  O    ASN A 115      17.583  58.482  55.728  1.00 14.85           O
ATOM    889  CB   ASN A 115      17.214  60.350  53.558  1.00 14.13           C
ATOM    890  CG   ASN A 115      15.780  60.683  53.908  1.00 16.01           C
ATOM    891  OD1  ASN A 115      14.842  60.038  53.433  1.00 14.72           O
ATOM    892  ND2  ASN A 115      15.598  61.708  54.734  1.00 14.78           N
ATOM    893  N    SER A 116      16.481  56.928  54.535  1.00 12.83           N
ATOM    894  CA   SER A 116      16.133  56.109  55.696  1.00 13.22           C
ATOM    895  C    SER A 116      17.324  55.431  56.383  1.00 13.12           C
ATOM    896  O    SER A 116      17.435  55.467  57.605  1.00 13.43           O
ATOM    897  CB   SER A 116      15.099  55.043  55.304  1.00 14.89           C
ATOM    898  OG   SER A 116      13.824  55.614  55.035  1.00 14.66           O
ATOM    899  N    VAL A 117      18.203  54.789  55.621  1.00 11.52           N
ATOM    900  CA   VAL A 117      19.348  54.143  56.252  1.00 12.67           C
ATOM    901  C    VAL A 117      20.257  55.190  56.915  1.00 13.35           C
ATOM    902  O    VAL A 117      20.693  55.004  58.048  1.00 15.00           O
ATOM    903  CB   VAL A 117      20.118  53.251  55.246  1.00 13.98           C
ATOM    904  CG1  VAL A 117      21.424  52.763  55.856  1.00 12.91           C
ATOM    905  CG2  VAL A 117      19.252  52.039  54.882  1.00 10.50           C
ATOM    906  N    PRO A 118      20.554  56.303  56.222  1.00 12.48           N
ATOM    907  CA   PRO A 118      21.402  57.332  56.834  1.00 14.61           C
ATOM    908  C    PRO A 118      20.862  57.725  58.220  1.00 14.68           C
ATOM    909  O    PRO A 118      21.616  57.869  59.178  1.00 14.33           O
ATOM    910  CB   PRO A 118      21.305  58.491  55.839  1.00 14.71           C
ATOM    911  CG   PRO A 118      21.260  57.770  54.529  1.00 15.90           C
ATOM    912  CD   PRO A 118      20.307  56.605  54.800  1.00 13.01           C
ATOM    913  N    GLN A 119      19.549  57.902  58.314  1.00 16.22           N
ATOM    914  CA   GLN A 119      18.925  58.266  59.587  1.00 18.27           C
ATOM    915  C    GLN A 119      19.198  57.218  60.657  1.00 16.55           C
ATOM    916  O    GLN A 119      19.493  57.555  61.800  1.00 15.44           O
ATOM    917  CB   GLN A 119      17.415  58.433  59.419  1.00 21.76           C
ATOM    918  CG   GLN A 119      16.996  59.794  58.892  1.00 30.11           C
ATOM    919  CD   GLN A 119      17.444  60.928  59.800  1.00 33.27           C
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ATOM    920  OE1 GLN A 119      18.595  61.368  59.739  1.00 35.95           O
ATOM    921  NE2 GLN A 119      16.537  61.397  60.660  1.00 34.47           N
ATOM    922  N   VAL A 120      19.093  55.946  60.285  1.00 15.75           N
ATOM    923  CA  VAL A 120      19.348  54.873  61.234  1.00 15.54           C
ATOM    924  C   VAL A 120      20.817  54.881  61.659  1.00 17.43           C
ATOM    925  O   VAL A 120      21.125  54.601  62.818  1.00 17.26           O
ATOM    926  CB  VAL A 120      18.979  53.498  60.632  1.00 16.19           C
ATOM    927  CG1 VAL A 120      19.318  52.386  61.621  1.00 14.15           C
ATOM    928  CG2 VAL A 120      17.481  53.469  60.308  1.00 16.52           C
ATOM    929  N   VAL A 121      21.719  55.202  60.726  1.00 16.62           N
ATOM    930  CA  VAL A 121      23.146  55.261  61.039  1.00 16.33           C
ATOM    931  C   VAL A 121      23.361  56.351  62.091  1.00 17.49           C
ATOM    932  O   VAL A 121      24.055  56.140  63.093  1.00 17.74           O
ATOM    933  CB  VAL A 121      24.004  55.604  59.784  1.00 16.60           C
ATOM    934  CG1 VAL A 121      25.432  55.953  60.204  1.00 16.63           C
ATOM    935  CG2 VAL A 121      24.031  54.417  58.824  1.00 15.25           C
ATOM    936  N   ARG A 122      22.761  57.517  61.855  1.00 15.43           N
ATOM    937  CA  ARG A 122      22.869  58.639  62.780  1.00 15.28           C
ATOM    938  C   ARG A 122      22.298  58.228  64.131  1.00 17.08           C
ATOM    939  O   ARG A 122      22.873  58.530  65.186  1.00 16.87           O
ATOM    940  CB  ARG A 122      22.103  59.846  62.228  1.00 14.60           C
ATOM    941  CG  ARG A 122      22.137  61.100  63.095  1.00 16.21           C
ATOM    942  CD  ARG A 122      23.547  61.674  63.227  1.00 17.26          .C
ATOM    943  NE  ARG A 122      24.225  61.229  64.442  1.00 17.99           N
ATOM    944  CZ  ARG A 122      25.442  61.631  64.805  1.00 18.75           C
ATOM    945  NH1 ARG A 122      26.103  62.482  64.035  1.00 15.15           N
ATOM    946  NH2 ARG A 122      25.990  61.200  65.942  1.00 14.32           N
ATOM    947  N   ARG A 123      21.163  57.534  64.094  1.00 15.95           N
ATOM    948  CA  ARG A 123      20.520  57.067  65.314  1.00 15.39           C
ATOM    949  C   ARG A 123      21.414  56.090  66.068  1.00 14.94           C
ATOM    950  O   ARG A 123      21.560  56.178  67.287  1.00 14.86           O
ATOM    951  CB  ARG A 123      19.180  56.393  64.989  1.00 16.23           C
ATOM    952  CG  ARG A 123      18.614  55.550  66.128  1.00 16.26           C
ATOM    953  CD  ARG A 123      18.428  56.364  67.404  1.00 15.79           C
ATOM    954  NE  ARG A 123      18.124  55.486. 68.529  1.00 17.29           N
ATOM    955  CZ  ARG A 123      18.468  55.728  69.788  1.00 15.65           C
ATOM    956  NH1 ARG A 123      19.129  56.837  70.098  1.00 12.81           N
ATOM    957  NH2 ARG A 123      18.183  54.838  70.732  1.00 13.89           N
ATOM    958  N   ILE A 124      22.000  55.149  65.344  1.00 15.11           N
ATOM    959  CA  ILE A 124      22.870  54.169  65.977  1.00 17.68           C
ATOM    960  C   ILE A 124      24.067  54.849  66.639  1.00 17.43           C
ATOM    961  O   ILE A 124      24.401  54.543  67.784  1.00 19.02           O
ATOM    962  CB  ILE A 124      23.342  53.100  64.960  1.00 16.62           C
ATOM    963  CG1 ILE A 124      22.189  52.118  64.703  1.00 16.70           C
ATOM    964  CG2 ILE A 124      24.586  52.389  65.484  1.00 16.27           C
ATOM    965  CD1 ILE A 124      22.462  51.050  63.654  1.00 17.20           C
ATOM    966  N   ASN A 125      24.708  55.771  65.929  1.00 17.56           N
ATOM    967  CA  ASN A 125      25.836  56.481  66.507  1.00 16.12           C
ATOM    968  C   ASN A 125      25.415  57.255  67.752  1.00 16.67           C
ATOM    969  O   ASN A 125      26.142  57.264  68.743  1.00 17.22           O
ATOM    970  CB  ASN A 125      26.475  57.424  65.483  1.00 16.30           C
ATOM    971  CG  ASN A 125      27.500  56.716  64.612  1.00 18.46           C
ATOM    972  OD1 ASN A 125      28.197  55.815  65.077  1.00 17.63           O
ATOM    973  ND2 ASN A 125      27.603  57.121  63.347  1.00 17.74           N
ATOM    974  N   ASN A 126      24.250  57.902  67.711  1.00 16.09           N
ATOM    975  CA  ASN A 126      23.766  58.652  68.874  1.00 16.63           C
ATOM    976  C   ASN A 126      23.604  57.735  70.091  1.00 17.54           C
ATOM    977  O   ASN A 126      23.971  58.100  71.214  1.00 18.29           O
ATOM    978  CB  ASN A 126      22.410  59.317  68.592  1.00 16.79           C
ATOM    979  CG  ASN A 126      22.499  60.452  67.581  1.00 16.80           C
ATOM    980  OD1 ASN A 126      23.575  60.992  67.319  1.00 14.48           O
ATOM    981  ND2 ASN A 126      21.354  60.834  67.029  1.00 13.20           N
ATOM    982  N   ALA A 127      23.046  56.550  69.863  1.00 16.05           N
ATOM    983  CA  ALA A 127      22.820  55.590  70.939  1.00 16.74           C
ATOM    984  C   ALA A 127      24.139  55.119  71.528  1.00 15.55           C
ATOM    985  O   ALA A 127      24.269  54.969  72.740  1.00 15.78           O
ATOM    986  CB  ALA A 127      22.018  54.398  70.421  1.00 15.66           C
ATOM    987  N   LEU A 128      25.117  54.887  70.660  1.00 16.29           N
ATOM    988  CA  LEU A 128      26.437  54.443  71.093  1.00 15.44           C
ATOM    989  C   LEU A 128      27.166  55.544  71.847  1.00 16.11           C
ATOM    990  O   LEU A 128      27.949  55.264  72.752  1.00 17.33           O
ATOM    991  CB  LEU A 128      27.271  54.004  69.891  1.00 13.65           C
ATOM    992  CG  LEU A 128      26.786  52.733  69.193  1.00 14.98           C
ATOM    993  CD1 LEU A 128      27.642  52.465  67.967  1.00 13.00           C
ATOM    994  CD2 LEU A 128      26.843  51.556  70.168  1.00 11.76           C
ATOM    995  N   GLN A 129      26.916  56.795  71.468  1.00 15.69           N
ATOM    996  CA  GLN A 129      27.555  57.923  72.138  1.00 16.61           C
ATOM    997  C   GLN A 129      26.992  58.076  73.543  1.00 16.69           C
ATOM    998  O   GLN A 129      27.716  58.446  74.463  1.00 15.29           O
ATOM    999  CB  GLN A 129      27.351  59.225  71.350  1.00 14.96           C
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|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1000 | CG  | GLN | A | 129 | 28.259 | 59.351 | 70.128 | 1.00 | 20.99 | C |
| ATOM | 1001 | CD  | GLN | A | 129 | 27.933 | 60.561 | 69.264 | 1.00 | 22.64 | C |
| ATOM | 1002 | OE1 | GLN | A | 129 | 26.835 | 60.670 | 68.714 | 1.00 | 25.02 | O |
| ATOM | 1003 | NE2 | GLN | A | 129 | 28.889 | 61.473 | 69.138 | 1.00 | 23.30 | N |
| ATOM | 1004 | N   | ARG | A | 130 | 25.705 | 57.780 | 73.709 | 1.00 | 15.61 | N |
| ATOM | 1005 | CA  | ARG | A | 130 | 25.078 | 57.897 | 75.022 | 1.00 | 15.55 | C |
| ATOM | 1006 | C   | ARG | A | 130 | 25.670 | 56.834 | 75.936 | 1.00 | 16.56 | C |
| ATOM | 1007 | O   | ARG | A | 130 | 25.998 | 57.111 | 77.091 | 1.00 | 16.44 | O |
| ATOM | 1008 | CB  | ARG | A | 130 | 23.557 | 57.725 | 74.931 | 1.00 | 12.43 | C |
| ATOM | 1009 | CG  | ARG | A | 130 | 22.824 | 58.018 | 76.242 | 1.00 | 15.81 | C |
| ATOM | 1010 | CD  | ARG | A | 130 | 22.815 | 59.513 | 76.581 | 1.00 | 13.65 | C |
| ATOM | 1011 | NE  | ARG | A | 130 | 21.838 | 60.240 | 75.773 | 1.00 | 17.03 | N |
| ATOM | 1012 | CZ  | ARG | A | 130 | 21.989 | 61.485 | 75.326 | 1.00 | 16.24 | C |
| ATOM | 1013 | NH1 | ARG | A | 130 | 23.093 | 62.170 | 75.598 | 1.00 | 17.02 | N |
| ATOM | 1014 | NH2 | ARG | A | 130 | 21.027 | 62.045 | 74.604 | 1.00 | 16.72 | N |
| ATOM | 1015 | N   | ALA | A | 131 | 25.811 | 55.619 | 75.413 | 1.00 | 16.00 | N |
| ATOM | 1016 | CA  | ALA | A | 131 | 26.385 | 54.531 | 76.191 | 1.00 | 18.51 | C |
| ATOM | 1017 | C   | ALA | A | 131 | 27.804 | 54.928 | 76.567 | 1.00 | 19.71 | C |
| ATOM | 1018 | O   | ALA | A | 131 | 28.255 | 54.670 | 77.683 | 1.00 | 19.93 | O |
| ATOM | 1019 | CB  | ALA | A | 131 | 26.405 | 53.237 | 75.374 | 1.00 | 19.18 | C |
| ATOM | 1020 | N   | ASP | A | 132 | 28.498 | 55.561 | 75.624 | 1.00 | 20.44 | N |
| ATOM | 1021 | CA  | ASP | A | 132 | 29.866 | 56.008 | 75.844 | 1.00 | 21.27 | C |
| ATOM | 1022 | C   | ASP | A | 132 | 29.899 | 57.056 | 76.956 | 1.00 | 21.98 | C |
| ATOM | 1023 | O   | ASP | A | 132 | 30.724 | 56.987 | 77.860 | 1.00 | 23.36 | O |
| ATOM | 1024 | CB  | ASP | A | 132 | 30.434 | 56.592 | 74.552 | 1.00 | 20.97 | C |
| ATOM | 1025 | CG  | ASP | A | 132 | 31.841 | 57.121 | 74.721 | 1.00 | 21.60 | C |
| ATOM | 1026 | OD1 | ASP | A | 132 | 32.726 | 56.339 | 75.131 | 1.00 | 22.43 | O |
| ATOM | 1027 | OD2 | ASP | A | 132 | 32.063 | 58.319 | 74.440 | 1.00 | 21.41 | O |
| ATOM | 1028 | N   | GLN | A | 133 | 28.987 | 58.019 | 76.886 | 1.00 | 21.91 | N |
| ATOM | 1029 | CA  | GLN | A | 133 | 28.897 | 59.079 | 77.890 | 1.00 | 20.92 | C |
| ATOM | 1030 | C   | GLN | A | 133 | 28.573 | 58.506 | 79.264 | 1.00 | 21.33 | C |
| ATOM | 1031 | O   | GLN | A | 133 | 29.163 | 58.903 | 80.267 | 1.00 | 23.44 | O |
| ATOM | 1032 | CB  | GLN | A | 133 | 27.813 | 60.081 | 77.492 | 1.00 | 18.84 | C |
| ATOM | 1033 | CG  | GLN | A | 133 | 28.139 | 60.848 | 76.226 | 1.00 | 17.21 | C |
| ATOM | 1034 | CD  | GLN | A | 133 | 26.907 | 61.336 | 75.493 | 1.00 | 17.88 | C |
| ATOM | 1035 | OE1 | GLN | A | 133 | 27.008 | 61.964 | 74.436 | 1.00 | 20.45 | O |
| ATOM | 1036 | NE2 | GLN | A | 133 | 25.733 | 61.046 | 76.043 | 1.00 | 18.20 | N |
| ATOM | 1037 | N   | ILE | A | 134 | 27.633 | 57.570 | 79.304 | 1.00 | 19.86 | N |
| ATOM | 1038 | CA  | ILE | A | 134 | 27.226 | 56.953 | 80.555 | 1.00 | 20.69 | C |
| ATOM | 1039 | C   | ILE | A | 134 | 28.370 | 56.176 | 81.188 | 1.00 | 21.87 | C |
| ATOM | 1040 | O   | ILE | A | 134 | 28.597 | 56.265 | 82.394 | 1.00 | 21.72 | O |
| ATOM | 1041 | CB  | ILE | A | 134 | 26.036 | 56.005 | 80.332 | 1.00 | 20.12 | C |
| ATOM | 1042 | CG1 | ILE | A | 134 | 24.792 | 56.823 | 79.964 | 1.00 | 19.73 | C |
| ATOM | 1043 | CG2 | ILE | A | 134 | 25.802 | 55.141 | 81.575 | 1.00 | 17.58 | C |
| ATOM | 1044 | CD1 | ILE | A | 134 | 23.614 | 55.972 | 79.484 | 1.00 | 17.97 | C |
| ATOM | 1045 | N   | ALA | A | 135 | 29.086 | 55.418 | 80.365 | 1.00 | 22.92 | N |
| ATOM | 1046 | CA  | ALA | A | 135 | 30.201 | 54.612 | 80.835 | 1.00 | 24.88 | C |
| ATOM | 1047 | C   | ALA | A | 135 | 31.288 | 55.484 | 81.452 | 1.00 | 26.61 | C |
| ATOM | 1048 | O   | ALA | A | 135 | 31.916 | 55.094 | 82.436 | 1.00 | 27.10 | O |
| ATOM | 1049 | CB  | ALA | A | 135 | 30.778 | 53.794 | 79.684 | 1.00 | 24.31 | C |
| ATOM | 1050 | N   | LYS | A | 136 | 31.512 | 56.660 | 80.873 | 1.00 | 27.24 | N |
| ATOM | 1051 | CA  | LYS | A | 136 | 32.530 | 57.570 | 81.389 | 1.00 | 27.79 | C |
| ATOM | 1052 | C   | LYS | A | 136 | 32.192 | 58.059 | 82.798 | 1.00 | 27.22 | C |
| ATOM | 1053 | O   | LYS | A | 136 | 33.060 | 58.082 | 83.665 | 1.00 | 28.67 | O |
| ATOM | 1054 | CB  | LYS | A | 136 | 32.710 | 58.775 | 80.452 | 1.00 | 27.85 | C |
| ATOM | 1055 | CG  | LYS | A | 136 | 33.862 | 59.699 | 80.850 | 1.00 | 29.03 | C |
| ATOM | 1056 | CD  | LYS | A | 136 | 34.057 | 60.829 | 79.848 | 1.00 | 29.15 | C |
| ATOM | 1057 | CE  | LYS | A | 136 | 35.362 | 61.580 | 80.091 | 1.00 | 29.13 | C |
| ATOM | 1058 | NZ  | LYS | A | 136 | 35.614 | 62.625 | 79.046 | 1.00 | 25.76 | N |
| ATOM | 1059 | N   | ILE | A | 137 | 30.942 | 58.448 | 83.038 | 1.00 | 27.49 | N |
| ATOM | 1060 | CA  | ILE | A | 137 | 30.575 | 58.924 | 84.372 | 1.00 | 27.61 | C |
| ATOM | 1061 | C   | ILE | A | 137 | 30.403 | 57.775 | 85.370 | 1.00 | 28.76 | C |
| ATOM | 1062 | O   | ILE | A | 137 | 30.446 | 57.986 | 86.579 | 1.00 | 29.87 | O |
| ATOM | 1063 | CB  | ILE | A | 137 | 29.277 | 59.778 | 84.361 | 1.00 | 25.89 | C |
| ATOM | 1064 | CG1 | ILE | A | 137 | 28.071 | 58.914 | 84.004 | 1.00 | 26.10 | C |
| ATOM | 1065 | CG2 | ILE | A | 137 | 29.422 | 60.928 | 83.378 | 1.00 | 25.64 | C |
| ATOM | 1066 | CD1 | ILE | A | 137 | 26.760 | 59.665 | 84.065 | 1.00 | 24.36 | C |
| ATOM | 1067 | N   | GLU | A | 138 | 30.216 | 56.558 | 84.874 | 1.00 | 28.45 | N |
| ATOM | 1068 | CA  | GLU | A | 138 | 30.063 | 55.421 | 85.771 | 1.00 | 28.85 | C |
| ATOM | 1069 | C   | GLU | A | 138 | 31.418 | 54.754 | 86.024 | 1.00 | 29.93 | C |
| ATOM | 1070 | O   | GLU | A | 138 | 31.518 | 53.802 | 86.798 | 1.00 | 29.38 | O |
| ATOM | 1071 | CB  | GLU | A | 138 | 29.066 | 54.406 | 85.192 | 1.00 | 27.20 | C |
| ATOM | 1072 | CG  | GLU | A | 138 | 27.664 | 54.975 | 84.978 | 1.00 | 30.34 | C |
| ATOM | 1073 | CD  | GLU | A | 138 | 26.628 | 53.914 | 84.638 | 1.00 | 30.70 | C |
| ATOM | 1074 | OE1 | GLU | A | 138 | 26.941 | 53.000 | 83.846 | 1.00 | 31.56 | O |
| ATOM | 1075 | OE2 | GLU | A | 138 | 25.493 | 54.000 | 85.153 | 1.00 | 29.95 | O |
| ATOM | 1076 | N   | GLY | A | 139 | 32.460 | 55.269 | 85.375 | 1.00 | 30.68 | N |
| ATOM | 1077 | CA  | GLY | A | 139 | 33.788 | 54.705 | 85.541 | 1.00 | 31.89 | C |
| ATOM | 1078 | C   | GLY | A | 139 | 33.857 | 53.297 | 84.985 | 1.00 | 32.88 | C |
| ATOM | 1079 | O   | GLY | A | 139 | 34.731 | 52.507 | 85.350 | 1.00 | 33.43 | O |

| ATOM | 1080 | N | ASP A 140 | 32.922 | 52.993 | 84.092 | 1.00 | 32.99 | N |
| ATOM | 1081 | CA | ASP A 140 | 32.820 | 51.687 | 83.454 | 1.00 | 32.83 | C |
| ATOM | 1082 | C | ASP A 140 | 33.776 | 51.547 | 82.266 | 1.00 | 33.33 | C |
| ATOM | 1083 | O | ASP A 140 | 33.593 | 52.197 | 81.239 | 1.00 | 33.41 | O |
| ATOM | 1084 | CB | ASP A 140 | 31.378 | 51.480 | 82.987 | 1.00 | 33.15 | C |
| ATOM | 1085 | CG | ASP A 140 | 31.177 | 50.175 | 82.256 | 1.00 | 32.34 | C |
| ATOM | 1086 | OD1 | ASP A 140 | 32.159 | 49.425 | 82.094 | 1.00 | 31.57 | O |
| ATOM | 1087 | OD2 | ASP A 140 | 30.030 | 49.907 | 81.845 | 1.00 | 30.43 | O |
| ATOM | 1088 | N | THR A 141 | 34.791 | 50.697 | 82.410 | 1.00 | 33.95 | N |
| ATOM | 1089 | CA | THR A 141 | 35.762 | 50.475 | 81.340 | 1.00 | 34.59 | C |
| ATOM | 1090 | C | THR A 141 | 35.543 | 49.105 | 80.713 | 1.00 | 34.71 | C |
| ATOM | 1091 | O | THR A 141 | 36.410 | 48.578 | 80.014 | 1.00 | 35.59 | O |
| ATOM | 1092 | CB | THR A 141 | 37.228 | 50.562 | 81.848 | 1.00 | 34.56 | C |
| ATOM | 1093 | OG1 | THR A 141 | 37.438 | 49.628 | 82.910 | 1.00 | 34.99 | O |
| ATOM | 1094 | CG2 | THR A 141 | 37.534 | 51.978 | 82.337 | 1.00 | 34.34 | C |
| ATOM | 1095 | N | SER A 142 | 34.371 | 48.541 | 80.977 | 1.00 | 34.24 | N |
| ATOM | 1096 | CA | SER A 142 | 33.976 | 47.243 | 80.449 | 1.00 | 33.68 | C |
| ATOM | 1097 | C | SER A 142 | 34.183 | 47.168 | 78.931 | 1.00 | 33.65 | C |
| ATOM | 1098 | O | SER A 142 | 34.615 | 46.140 | 78.409 | 1.00 | 34.02 | O |
| ATOM | 1099 | CB | SER A 142 | 32.504 | 46.989 | 80.795 | 1.00 | 34.05 | C |
| ATOM | 1100 | OG | SER A 142 | 31.949 | 45.925 | 80.040 | 1.00 | 39.80 | O |
| ATOM | 1101 | N | VAL A 143 | 33.877 | 48.259 | 78.229 | 1.00 | 31.28 | N |
| ATOM | 1102 | CA | VAL A 143 | 34.023 | 48.308 | 76.773 | 1.00 | 29.67 | C |
| ATOM | 1103 | C | VAL A 143 | 35.114 | 49.291 | 76.345 | 1.00 | 29.42 | C |
| ATOM | 1104 | O | VAL A 143 | 35.093 | 50.462 | 76.714 | 1.00 | 27.57 | O |
| ATOM | 1105 | CB | VAL A 143 | 32.688 | 48.716 | 76.091 | 1.00 | 28.07 | C |
| ATOM | 1106 | CG1 | VAL A 143 | 32.870 | 48.781 | 74.595 | 1.00 | 24.46 | C |
| ATOM | 1107 | CG2 | VAL A 143 | 31.596 | 47.727 | 76.448 | 1.00 | 26.32 | C |
| ATOM | 1108 | N | GLU A 144 | 36.057 | 48.812 | 75.544 | 1.00 | 30.29 | N |
| ATOM | 1109 | CA | GLU A 144 | 37.160 | 49.646 | 75.087 | 1.00 | 33.01 | C |
| ATOM | 1110 | C | GLU A 144 | 36.715 | 50.694 | 74.071 | 1.00 | 31.66 | C |
| ATOM | 1111 | O | GLU A 144 | 37.133 | 51.854 | 74.143 | 1.00 | 32.19 | O |
| ATOM | 1112 | CB | GLU A 144 | 38.265 | 48.775 | 74.478 | 1.00 | 37.61 | C |
| ATOM | 1113 | CG | GLU A 144 | 37.936 | 48.238 | 73.090 | 1.00 | 45.13 | C |
| ATOM | 1114 | CD | GLU A 144 | 36.655 | 47.417 | 73.058 | 1.00 | 48.26 | C |
| ATOM | 1115 | OE1 | GLU A 144 | 35.951 | 47.468 | 72.021 | 1.00 | 48.24 | O |
| ATOM | 1116 | OE2 | GLU A 144 | 36.361 | 46.717 | 74.058 | 1.00 | 49.57 | O |
| ATOM | 1117 | N | ASN A 145 | 35.864 | 50.289 | 73.129 | 1.00 | 28.27 | N |
| ATOM | 1118 | CA | ASN A 145 | 35.381 | 51.205 | 72.095 | 1.00 | 25.07 | C |
| ATOM | 1119 | C | ASN A 145 | 33.869 | 51.109 | 71.891 | 1.00 | 23.65 | C |
| ATOM | 1120 | O | ASN A 145 | 33.381 | 50.190 | 71.225 | 1.00 | 21.14 | O |
| ATOM | 1121 | CB | ASN A 145 | 36.086 | 50.913 | 70.767 | 1.00 | 22.52 | C |
| ATOM | 1122 | CG | ASN A 145 | 35.622 | 51.824 | 69.641 | 1.00 | 23.63 | C |
| ATOM | 1123 | OD1 | ASN A 145 | 35.581 | 51.417 | 68.475 | 1.00 | 25.36 | O |
| ATOM | 1124 | ND2 | ASN A 145 | 35.288 | 53.063 | 69.976 | 1.00 | 20.94 | N |
| ATOM | 1125 | N | TRP A 146 | 33.127 | 52.051 | 72.467 | 1.00 | 22.81 | N |
| ATOM | 1126 | CA | TRP A 146 | 31.674 | 52.055 | 72.307 | 1.00 | 22.35 | C |
| ATOM | 1127 | C | TRP A 146 | 31.286 | 52.424 | 70.877 | 1.00 | 22.17 | C |
| ATOM | 1128 | O | TRP A 146 | 30.288 | 51.932 | 70.342 | 1.00 | 21.07 | O |
| ATOM | 1129 | CB | TRP A 146 | 31.014 | 53.037 | 73.283 | 1.00 | 20.48 | C |
| ATOM | 1130 | CG | TRP A 146 | 30.789 | 52.448 | 74.632 | 1.00 | 20.49 | C |
| ATOM | 1131 | CD1 | TRP A 146 | 31.530 | 52.661 | 75.761 | 1.00 | 21.17 | C |
| ATOM | 1132 | CD2 | TRP A 146 | 29.793 | 51.483 | 74.981 | 1.00 | 20.50 | C |
| ATOM | 1133 | NE1 | TRP A 146 | 31.058 | 51.883 | 76.789 | 1.00 | 19.77 | N |
| ATOM | 1134 | CE2 | TRP A 146 | 29.994 | 51.148 | 76.337 | 1.00 | 20.40 | C |
| ATOM | 1135 | CE3 | TRP A 146 | 28.752 | 50.862 | 74.277 | 1.00 | 19.68 | C |
| ATOM | 1136 | CZ2 | TRP A 146 | 29.193 | 50.218 | 77.002 | 1.00 | 21.00 | C |
| ATOM | 1137 | CZ3 | TRP A 146 | 27.961 | 49.942 | 74.936 | 1.00 | 19.81 | C |
| ATOM | 1138 | CH2 | TRP A 146 | 28.185 | 49.626 | 76.287 | 1.00 | 21.41 | C |
| ATOM | 1139 | N | LEU A 147 | 32.077 | 53.294 | 70.260 | 1.00 | 20.94 | N |
| ATOM | 1140 | CA | LEU A 147 | 31.797 | 53.713 | 68.899 | 1.00 | 22.25 | C |
| ATOM | 1141 | C | LEU A 147 | 32.278 | 52.690 | 67.883 | 1.00 | 21.50 | C |
| ATOM | 1142 | O | LEU A 147 | 33.245 | 52.919 | 67.163 | 1.00 | 20.68 | O |
| ATOM | 1143 | CB | LEU A 147 | 32.431 | 55.077 | 68.623 | 1.00 | 23.85 | C |
| ATOM | 1144 | CG | LEU A 147 | 31.622 | 56.207 | 69.261 | 1.00 | 26.05 | C |
| ATOM | 1145 | CD1 | LEU A 147 | 32.400 | 57.495 | 69.205 | 1.00 | 29.03 | C |
| ATOM | 1146 | CD2 | LEU A 147 | 30.292 | 56.350 | 68.528 | 1.00 | 27.30 | C |
| ATOM | 1147 | N | ALA A 148 | 31.590 | 51.555 | 67.841 | 1.00 | 21.09 | N |
| ATOM | 1148 | CA | ALA A 148 | 31.922 | 50.494 | 66.903 | 1.00 | 21.47 | C |
| ATOM | 1149 | C | ALA A 148 | 31.615 | 50.975 | 65.483 | 1.00 | 21.21 | C |
| ATOM | 1150 | O | ALA A 148 | 30.665 | 51.726 | 65.262 | 1.00 | 22.86 | O |
| ATOM | 1151 | CB | ALA A 148 | 31.115 | 49.249 | 67.223 | 1.00 | 19.91 | C |
| ATOM | 1152 | N | PRO A 149 | 32.436 | 50.570 | 64.506 | 1.00 | 20.97 | N |
| ATOM | 1153 | CA | PRO A 149 | 32.200 | 50.988 | 63.124 | 1.00 | 19.79 | C |
| ATOM | 1154 | C | PRO A 149 | 30.886 | 50.421 | 62.595 | 1.00 | 20.07 | C |
| ATOM | 1155 | O | PRO A 149 | 30.502 | 49.297 | 62.924 | 1.00 | 19.66 | O |
| ATOM | 1156 | CB | PRO A 149 | 33.412 | 50.431 | 62.386 | 1.00 | 20.62 | C |
| ATOM | 1157 | CG | PRO A 149 | 33.750 | 49.199 | 63.181 | 1.00 | 20.39 | C |
| ATOM | 1158 | CD | PRO A 149 | 33.631 | 49.714 | 64.597 | 1.00 | 21.71 | C |
| ATOM | 1159 | N | ILE A 150 | 30.207 | 51.210 | 61.771 | 1.00 | 19.29 | N |

| ATOM | 1160 | CA  | ILE | A | 150 | 28.936 | 50.808 | 61.188 | 1.00 | 17.82 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1161 | C   | ILE | A | 150 | 29.077 | 50.567 | 59.689 | 1.00 | 16.60 | C |
| ATOM | 1162 | O   | ILE | A | 150 | 29.573 | 51.424 | 58.963 | 1.00 | 17.00 | O |
| ATOM | 1163 | CB  | ILE | A | 150 | 27.861 | 51.908 | 61.396 | 1.00 | 18.28 | C |
| ATOM | 1164 | CG1 | ILE | A | 150 | 27.642 | 52.153 | 62.890 | 1.00 | 17.32 | C |
| ATOM | 1165 | CG2 | ILE | A | 150 | 26.560 | 51.509 | 60.712 | 1.00 | 16.46 | C |
| ATOM | 1166 | CD1 | ILE | A | 150 | 26.864 | 53.414 | 63.191 | 1.00 | 17.66 | C |
| ATOM | 1167 | N   | VAL | A | 151 | 28.652 | 49.390 | 59.245 | 1.00 | 16.88 | N |
| ATOM | 1168 | CA  | VAL | A | 151 | 28.661 | 49.024 | 57.834 | 1.00 | 16.47 | C |
| ATOM | 1169 | C   | VAL | A | 151 | 27.191 | 49.080 | 57.427 | 1.00 | 17.39 | C |
| ATOM | 1170 | O   | VAL | A | 151 | 26.380 | 48.319 | 57.945 | 1.00 | 18.67 | O |
| ATOM | 1171 | CB  | VAL | A | 151 | 29.192 | 47.585 | 57.622 | 1.00 | 17.52 | C |
| ATOM | 1172 | CG1 | VAL | A | 151 | 28.869 | 47.106 | 56.203 | 1.00 | 14.98 | C |
| ATOM | 1173 | CG2 | VAL | A | 151 | 30.702 | 47.554 | 57.852 | 1.00 | 15.78 | C |
| ATOM | 1174 | N   | ALA | A | 152 | 26.846 | 49.979 | 56.512 | 1.00 | 17.18 | N |
| ATOM | 1175 | CA  | ALA | A | 152 | 25.453 | 50.131 | 56.105 | 1.00 | 17.81 | C |
| ATOM | 1176 | C   | ALA | A | 152 | 25.111 | 49.721 | 54.679 | 1.00 | 18.83 | C |
| ATOM | 1177 | O   | ALA | A | 152 | 25.952 | 49.724 | 53.778 | 1.00 | 18.20 | O |
| ATOM | 1178 | CB  | ALA | A | 152 | 24.998 | 51.569 | 56.345 | 1.00 | 16.41 | C |
| ATOM | 1179 | N   | ASP | A | 153 | 23.834 | 49.397 | 54.504 | 1.00 | 18.49 | N |
| ATOM | 1180 | CA  | ASP | A | 153 | 23.265 | 48.960 | 53.243 | 1.00 | 16.25 | C |
| ATOM | 1181 | C   | ASP | A | 153 | 22.967 | 50.126 | 52.290 | 1.00 | 16.78 | C |
| ATOM | 1182 | O   | ASP | A | 153 | 22.148 | 50.992 | 52.592 | 1.00 | 18.26 | O |
| ATOM | 1183 | CB  | ASP | A | 153 | 21.970 | 48.210 | 53.538 | 1.00 | 15.17 | C |
| ATOM | 1184 | CG  | ASP | A | 153 | 21.521 | 47.340 | 52.391 | 1.00 | 16.30 | C |
| ATOM | 1185 | OD1 | ASP | A | 153 | 21.908 | 47.618 | 51.236 | 1.00 | 13.59 | O |
| ATOM | 1186 | OD2 | ASP | A | 153 | 20.768 | 46.381 | 52.655 | 1.00 | 16.12 | O |
| ATOM | 1187 | N   | GLY | A | 154 | 23.629 | 50.142 | 51.141 | 1.00 | 16.53 | N |
| ATOM | 1188 | CA  | GLY | A | 154 | 23.386 | 51.188 | 50.167 | 1.00 | 16.30 | C |
| ATOM | 1189 | C   | GLY | A | 154 | 22.464 | 50.645 | 49.090 | 1.00 | 16.24 | C |
| ATOM | 1190 | O   | GLY | A | 154 | 22.081 | 51.350 | 48.161 | 1.00 | 17.40 | O |
| ATOM | 1191 | N   | GLU | A | 155 | 22.109 | 49.373 | 49.229 | 1.00 | 15.04 | N |
| ATOM | 1192 | CA  | GLU | A | 155 | 21.235 | 48.689 | 48.285 | 1.00 | 16.98 | C |
| ATOM | 1193 | C   | GLU | A | 155 | 21.734 | 48.868 | 46.855 | 1.00 | 16.61 | C |
| ATOM | 1194 | O   | GLU | A | 155 | 22.899 | 48.590 | 46.567 | 1.00 | 17.25 | O |
| ATOM | 1195 | CB  | GLU | A | 155 | 19.790 | 49.197 | 48.422 | 1.00 | 17.98 | C |
| ATOM | 1196 | CG  | GLU | A | 155 | 19.250 | 49.112 | 49.840 | 1.00 | 18.73 | C |
| ATOM | 1197 | CD  | GLU | A | 155 | 17.739 | 49.008 | 49.904 | 1.00 | 23.04 | C |
| ATOM | 1198 | OE1 | GLU | A | 155 | 17.067 | 49.410 | 48.933 | 1.00 | 26.74 | O |
| ATOM | 1199 | OE2 | GLU | A | 155 | 17.218 | 48.535 | 50.937 | 1.00 | 22.27 | O |
| ATOM | 1200 | N   | ALA | A | 156 | 20.861 | 49.328 | 45.963 | 1.00 | 16.78 | N |
| ATOM | 1201 | CA  | ALA | A | 156 | 21.248 | 49.531 | 44.571 | 1.00 | 18.87 | C |
| ATOM | 1202 | C   | ALA | A | 156 | 21.374 | 51.017 | 44.214 | 1.00 | 20.00 | C |
| ATOM | 1203 | O   | ALA | A | 156 | 21.359 | 51.384 | 43.037 | 1.00 | 20.08 | O |
| ATOM | 1204 | CB  | ALA | A | 156 | 20.247 | 48.842 | 43.639 | 1.00 | 20.27 | C |
| ATOM | 1205 | N   | GLY | A | 157 | 21.490 | 51.867 | 45.233 | 1.00 | 18.44 | N |
| ATOM | 1206 | CA  | GLY | A | 157 | 21.652 | 53.288 | 44.987 | 1.00 | 18.65 | C |
| ATOM | 1207 | C   | GLY | A | 157 | 20.407 | 54.141 | 44.839 | 1.00 | 18.57 | C |
| ATOM | 1208 | O   | GLY | A | 157 | 20.506 | 55.374 | 44.845 | 1.00 | 18.10 | O |
| ATOM | 1209 | N   | PHE | A | 158 | 19.244 | 53.508 | 44.713 | 1.00 | 17.35 | N |
| ATOM | 1210 | CA  | PHE | A | 158 | 17.984 | 54.241 | 44.561 | 1.00 | 17.32 | C |
| ATOM | 1211 | C   | PHE | A | 158 | 17.977 | 55.122 | 43.309 | 1.00 | 18.61 | C |
| ATOM | 1212 | O   | PHE | A | 158 | 17.432 | 56.231 | 43.318 | 1.00 | 18.50 | O |
| ATOM | 1213 | CB  | PHE | A | 158 | 17.726 | 55.111 | 45.791 | 1.00 | 15.53 | C |
| ATOM | 1214 | CG  | PHE | A | 158 | 17.397 | 54.324 | 47.031 | 1.00 | 18.63 | C |
| ATOM | 1215 | CD1 | PHE | A | 158 | 16.085 | 53.950 | 47.308 | 1.00 | 14.77 | C |
| ATOM | 1216 | CD2 | PHE | A | 158 | 18.404 | 53.938 | 47.914 | 1.00 | 15.78 | C |
| ATOM | 1217 | CE1 | PHE | A | 158 | 15.784 | 53.208 | 48.444 | 1.00 | 16.83 | C |
| ATOM | 1218 | CE2 | PHE | A | 158 | 18.111 | 53.196 | 49.050 | 1.00 | 14.04 | C |
| ATOM | 1219 | CZ  | PHE | A | 158 | 16.807 | 52.831 | 49.318 | 1.00 | 15.59 | C |
| ATOM | 1220 | N   | GLY | A | 159 | 18.579 | 54.632 | 42.234 | 1.00 | 17.68 | N |
| ATOM | 1221 | CA  | GLY | A | 159 | 18.607 | 55.417 | 41.017 | 1.00 | 19.52 | C |
| ATOM | 1222 | C   | GLY | A | 159 | 19.930 | 55.350 | 40.284 | 1.00 | 19.34 | C |
| ATOM | 1223 | O   | GLY | A | 159 | 20.551 | 54.289 | 40.197 | 1.00 | 19.92 | O |
| ATOM | 1224 | N   | GLY | A | 160 | 20.356 | 56.489 | 39.752 | 1.00 | 18.46 | N |
| ATOM | 1225 | CA  | GLY | A | 160 | 21.599 | 56.539 | 39.010 | 1.00 | 18.95 | C |
| ATOM | 1226 | C   | GLY | A | 160 | 22.804 | 56.805 | 39.886 | 1.00 | 20.83 | C |
| ATOM | 1227 | O   | GLY | A | 160 | 22.739 | 56.684 | 41.114 | 1.00 | 20.81 | O |
| ATOM | 1228 | N   | ALA | A | 161 | 23.910 | 57.166 | 39.241 | 1.00 | 19.83 | N |
| ATOM | 1229 | CA  | ALA | A | 161 | 25.150 | 57.454 | 39.934 | 1.00 | 19.53 | C |
| ATOM | 1230 | C   | ALA | A | 161 | 25.001 | 58.643 | 40.884 | 1.00 | 18.97 | C |
| ATOM | 1231 | O   | ALA | A | 161 | 25.667 | 58.700 | 41.915 | 1.00 | 18.09 | O |
| ATOM | 1232 | CB  | ALA | A | 161 | 26.258 | 57.719 | 38.917 | 1.00 | 19.89 | C |
| ATOM | 1233 | N   | LEU | A | 162 | 24.133 | 59.589 | 40.535 | 1.00 | 17.83 | N |
| ATOM | 1234 | CA  | LEU | A | 162 | 23.914 | 60.759 | 41.381 | 1.00 | 19.31 | C |
| ATOM | 1235 | C   | LEU | A | 162 | 23.139 | 60.381 | 42.642 | 1.00 | 19.84 | C |
| ATOM | 1236 | O   | LEU | A | 162 | 23.389 | 60.928 | 43.713 | 1.00 | 20.26 | O |
| ATOM | 1237 | CB  | LEU | A | 162 | 23.172 | 61.844 | 40.606 | 1.00 | 18.25 | C |
| ATOM | 1238 | CG  | LEU | A | 162 | 23.956 | 62.334 | 39.387 | 1.00 | 20.92 | C |
| ATOM | 1239 | CD1 | LEU | A | 162 | 23.134 | 63.344 | 38.619 | 1.00 | 21.46 | C |

| ATOM | 1240 | CD2 | LEU | A | 162 | 25.285 | 62.947 | 39.842 | 1.00 | 21.59 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 1241 | N | ASN | A | 163 | 22.203 | 59.442 | 42.519 | 1.00 | 20.21 | N |
| ATOM | 1242 | CA | ASN | A | 163 | 21.437 | 58.997 | 43.680 | 1.00 | 18.93 | C |
| ATOM | 1243 | C | ASN | A | 163 | 22.404 | 58.244 | 44.592 | 1.00 | 18.10 | C |
| ATOM | 1244 | O | ASN | A | 163 | 22.330 | 58.346 | 45.816 | 1.00 | 16.46 | O |
| ATOM | 1245 | CB | ASN | A | 163 | 20.298 | 58.076 | 43.251 | 1.00 | 17.25 | C |
| ATOM | 1246 | CG | ASN | A | 163 | 19.266 | 58.784 | 42.387 | 1.00 | 18.52 | C |
| ATOM | 1247 | OD1 | ASN | A | 163 | 18.410 | 59.520 | 42.883 | 1.00 | 20.39 | O |
| ATOM | 1248 | ND2 | ASN | A | 163 | 19.345 | 58.564 | 41.091 | 1.00 | 14.76 | N |
| ATOM | 1249 | N | VAL | A | 164 | 23.309 | 57.485 | 43.978 | 1.00 | 17.95 | N |
| ATOM | 1250 | CA | VAL | A | 164 | 24.315 | 56.731 | 44.718 | 1.00 | 17.59 | C |
| ATOM | 1251 | C | VAL | A | 164 | 25.159 | 57.731 | 45.492 | 1.00 | 16.69 | C |
| ATOM | 1252 | O | VAL | A | 164 | 25.393 | 57.581 | 46.686 | 1.00 | 17.23 | O |
| ATOM | 1253 | CB | VAL | A | 164 | 25.257 | 55.945 | 43.755 | 1.00 | 17.16 | C |
| ATOM | 1254 | CG1 | VAL | A | 164 | 26.455 | 55.384 | 44.516 | 1.00 | 16.69 | C |
| ATOM | 1255 | CG2 | VAL | A | 164 | 24.498 | 54.828 | 43.089 | 1.00 | 18.47 | C |
| ATOM | 1256 | N | TYR | A | 165 | 25.606 | 58.763 | 44.788 | 1.00 | 17.38 | N |
| ATOM | 1257 | CA | TYR | A | 165 | 26.447 | 59.789 | 45.381 | 1.00 | 17.37 | C |
| ATOM | 1258 | C | TYR | A | 165 | 25.819 | 60.435 | 46.612 | 1.00 | 17.13 | C |
| ATOM | 1259 | O | TYR | A | 165 | 26.472 | 60.579 | 47.644 | 1.00 | 15.92 | O |
| ATOM | 1260 | CB | TYR | A | 165 | 26.786 | 60.855 | 44.336 | 1.00 | 17.23 | C |
| ATOM | 1261 | CG | TYR | A | 165 | 27.719 | 61.933 | 44.848 | 1.00 | 17.77 | C |
| ATOM | 1262 | CD1 | TYR | A | 165 | 27.240 | 62.986 | 45.618 | 1.00 | 15.76 | C |
| ATOM | 1263 | CD2 | TYR | A | 165 | 29.084 | 61.888 | 44.572 | 1.00 | 18.32 | C |
| ATOM | 1264 | CE1 | TYR | A | 165 | 28.090 | 63.971 | 46.104 | 1.00 | 18.94 | C |
| ATOM | 1265 | CE2 | TYR | A | 165 | 29.950 | 62.874 | 45.049 | 1.00 | 19.88 | C |
| ATOM | 1266 | CZ | TYR | A | 165 | 29.445 | 63.911 | 45.815 | 1.00 | 19.82 | C |
| ATOM | 1267 | OH | TYR | A | 165 | 30.287 | 64.884 | 46.298 | 1.00 | 20.70 | O |
| ATOM | 1268 | N | GLU | A | 166 | 24.552 | 60.821 | 46.506 | 1.00 | 17.49 | N |
| ATOM | 1269 | CA | GLU | A | 166 | 23.869 | 61.453 | 47.623 | 1.00 | 16.29 | C |
| ATOM | 1270 | C | GLU | A | 166 | 23.669 | 60.497 | 48.804 | 1.00 | 17.31 | C |
| ATOM | 1271 | O | GLU | A | 166 | 23.758 | 60.909 | 49.965 | 1.00 | 17.87 | O |
| ATOM | 1272 | CB | GLU | A | 166 | 22.523 | 62.014 | 47.165 | 1.00 | 17.74 | C |
| ATOM | 1273 | CG | GLU | A | 166 | 22.627 | 63.288 | 46.352 | 1.00 | 18.26 | C |
| ATOM | 1274 | CD | GLU | A | 166 | 23.414 | 64.364 | 47.078 | 1.00 | 21.85 | C |
| ATOM | 1275 | OE1 | GLU | A | 166 | 22.992 | 64.781 | 48.176 | 1.00 | 17.79 | O |
| ATOM | 1276 | OE2 | GLU | A | 166 | 24.465 | 64.786 | 46.552 | 1.00 | 21.68 | O |
| ATOM | 1277 | N | LEU | A | 167 | 23.399 | 59.226 | 48.519 | 1.00 | 15.73 | N |
| ATOM | 1278 | CA | LEU | A | 167 | 23.201 | 58.264 | 49.595 | 1.00 | 15.56 | C |
| ATOM | 1279 | C | LEU | A | 167 | 24.506 | 58.090 | 50.368 | 1.00 | 15.32 | C |
| ATOM | 1280 | O | LEU | A | 167 | 24.511 | 58.119 | 51.602 | 1.00 | 16.12 | O |
| ATOM | 1281 | CB | LEU | A | 167 | 22.722 | 56.916 | 49.041 | 1.00 | 15.63 | C |
| ATOM | 1282 | CG | LEU | A | 167 | 22.516 | 55.796 | 50.065 | 1.00 | 15.08 | C |
| ATOM | 1283 | CD1 | LEU | A | 167 | 21.650 | 56.287 | 51.228 | 1.00 | 14.71 | C |
| ATOM | 1284 | CD2 | LEU | A | 167 | 21.873 | 54.597 | 49.376 | 1.00 | 14.46 | C |
| ATOM | 1285 | N | GLN | A | 168 | 25.610 | 57.921 | 49.641 | 1.00 | 14.60 | N |
| ATOM | 1286 | CA | GLN | A | 168 | 26.916 | 57.749 | 50.267 | 1.00 | 14.24 | C |
| ATOM | 1287 | C | GLN | A | 168 | 27.249 | 58.979 | 51.106 | 1.00 | 15.31 | C |
| ATOM | 1288 | O | GLN | A | 168 | 27.720 | 58.859 | 52.233 | 1.00 | 15.65 | O |
| ATOM | 1289 | CB | GLN | A | 168 | 27.997 | 57.537 | 49.205 | 1.00 | 14.00 | C |
| ATOM | 1290 | CG | GLN | A | 168 | 29.423 | 57.441 | 49.765 | 1.00 | 16.29 | C |
| ATOM | 1291 | CD | GLN | A | 168 | 29.713 | 56.120 | 50.457 | 1.00 | 16.97 | C |
| ATOM | 1292 | OE1 | GLN | A | 168 | 28.932 | 55.653 | 51.290 | 1.00 | 19.95 | O |
| ATOM | 1293 | NE2 | GLN | A | 168 | 30.848 | 55.512 | 50.121 | 1.00 | 16.58 | N |
| ATOM | 1294 | N | LYS | A | 169 | 26.994 | 60.160 | 50.551 | 1.00 | 15.01 | N |
| ATOM | 1295 | CA | LYS | A | 169 | 27.258 | 61.419 | 51.245 | 1.00 | 14.43 | C |
| ATOM | 1296 | C | LYS | A | 169 | 26.423 | 61.537 | 52.520 | 1.00 | 14.61 | C |
| ATOM | 1297 | O | LYS | A | 169 | 26.914 | 61.988 | 53.551 | 1.00 | 15.19 | O |
| ATOM | 1298 | CB | LYS | A | 169 | 26.958 | 62.604 | 50.319 | 1.00 | 14.16 | C |
| ATOM | 1299 | CG | LYS | A | 169 | 27.069 | 63.973 | 50.979 | 1.00 | 14.82 | C |
| ATOM | 1300 | CD | LYS | A | 169 | 26.768 | 65.066 | 49.972 | 1.00 | 16.96 | C |
| ATOM | 1301 | CE | LYS | A | 169 | 26.743 | 66.443 | 50.598 | 1.00 | 20.18 | C |
| ATOM | 1302 | NZ | LYS | A | 169 | 26.540 | 67.497 | 49.552 | 1.00 | 21.37 | N |
| ATOM | 1303 | N | ALA | A | 170 | 25.160 | 61.136 | 52.446 | 1.00 | 15.38 | N |
| ATOM | 1304 | CA | ALA | A | 170 | 24.276 | 61.197 | 53.602 | 1.00 | 15.21 | C |
| ATOM | 1305 | C | ALA | A | 170 | 24.702 | 60.190 | 54.678 | 1.00 | 15.63 | C |
| ATOM | 1306 | O | ALA | A | 170 | 24.641 | 60.487 | 55.875 | 1.00 | 17.60 | O |
| ATOM | 1307 | CB | ALA | A | 170 | 22.840 | 60.942 | 53.167 | 1.00 | 16.43 | C |
| ATOM | 1308 | N | LEU | A | 171 | 25.138 | 59.010 | 54.246 | 1.00 | 15.43 | N |
| ATOM | 1309 | CA | LEU | A | 171 | 25.597 | 57.960 | 55.156 | 1.00 | 15.73 | C |
| ATOM | 1310 | C | LEU | A | 171 | 26.834 | 58.438 | 55.918 | 1.00 | 17.90 | C |
| ATOM | 1311 | O | LEU | A | 171 | 26.965 | 58.213 | 57.123 | 1.00 | 17.44 | O |
| ATOM | 1312 | CB | LEU | A | 171 | 25.945 | 56.693 | 54.362 | 1.00 | 15.80 | C |
| ATOM | 1313 | CG | LEU | A | 171 | 24.786 | 55.896 | 53.740 | 1.00 | 14.50 | C |
| ATOM | 1314 | CD1 | LEU | A | 171 | 25.341 | 54.876 | 52.760 | 1.00 | 13.97 | C |
| ATOM | 1315 | CD2 | LEU | A | 171 | 23.985 | 55.202 | 54.831 | 1.00 | 11.56 | C |
| ATOM | 1316 | N | ILE | A | 172 | 27.734 | 59.108 | 55.202 | 1.00 | 17.38 | N |
| ATOM | 1317 | CA | ILE | A | 172 | 28.957 | 59.630 | 55.791 | 1.00 | 17.66 | C |
| ATOM | 1318 | C | ILE | A | 172 | 28.651 | 60.716 | 56.827 | 1.00 | 18.58 | C |
| ATOM | 1319 | O | ILE | A | 172 | 29.192 | 60.701 | 57.938 | 1.00 | 17.55 | O |

| ATOM | 1320 | CB | ILE A 172 | 29.890 | 60.195 | 54.682 | 1.00 | 17.01 | C |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1321 | CG1 | ILE A 172 | 30.438 | 59.037 | 53.843 | 1.00 | 17.28 | C |
| ATOM | 1322 | CG2 | ILE A 172 | 31.022 | 60.998 | 55.289 | 1.00 | 14.88 | C |
| ATOM | 1323 | CD1 | ILE A 172 | 31.300 | 59.473 | 52.678 | 1.00 | 15.10 | C |
| ATOM | 1324 | N | ALA A 173 | 27.774 | 61.650 | 56.470 | 1.00 | 18.09 | N |
| ATOM | 1325 | CA | ALA A 173 | 27.426 | 62.728 | 57.385 | 1.00 | 18.37 | C |
| ATOM | 1326 | C | ALA A 173 | 26.848 | 62.165 | 58.680 | 1.00 | 19.03 | C |
| ATOM | 1327 | O | ALA A 173 | 26.991 | 62.771 | 59.742 | 1.00 | 19.27 | O |
| ATOM | 1328 | CB | ALA A 173 | 26.434 | 63.676 | 56.727 | 1.00 | 18.69 | C |
| ATOM | 1329 | N | ALA A 174 | 26.211 | 60.999 | 58.587 | 1.00 | 19.16 | N |
| ATOM | 1330 | CA | ALA A 174 | 25.611 | 60.350 | 59.749 | 1.00 | 18.92 | C |
| ATOM | 1331 | C | ALA A 174 | 26.647 | 59.542 | 60.533 | 1.00 | 19.32 | C |
| ATOM | 1332 | O | ALA A 174 | 26.355 | 59.045 | 61.620 | 1.00 | 18.94 | O |
| ATOM | 1333 | CB | ALA A 174 | 24.468 | 59.440 | 59.309 | 1.00 | 17.25 | C |
| ATOM | 1334 | N | GLY A 175 | 27.844 | 59.396 | 59.970 | 1.00 | 18.78 | N |
| ATOM | 1335 | CA | GLY A 175 | 28.899 | 58.661 | 60.652 | 1.00 | 18.16 | C |
| ATOM | 1336 | C | GLY A 175 | 29.121 | 57.210 | 60.258 | 1.00 | 18.64 | C |
| ATOM | 1337 | O | GLY A 175 | 29.645 | 56.429 | 61.053 | 1.00 | 19.51 | O |
| ATOM | 1338 | N | VAL A 176 | 28.742 | 56.829 | 59.045 | 1.00 | 18.23 | N |
| ATOM | 1339 | CA | VAL A 176 | 28.942 | 55.442 | 58.622 | 1.00 | 17.11 | C |
| ATOM | 1340 | C | VAL A 176 | 30.435 | 55.153 | 58.456 | 1.00 | 18.09 | C |
| ATOM | 1341 | O | VAL A 176 | 31.221 | 56.059 | 58.173 | 1.00 | 15.27 | O |
| ATOM | 1342 | CB | VAL A 176 | 28.250 | 55.150 | 57.272 | 1.00 | 17.03 | C |
| ATOM | 1343 | CG1 | VAL A 176 | 29.154 | 55.572 | 56.112 | 1.00 | 11.35 | C |
| ATOM | 1344 | CG2 | VAL A 176 | 27.902 | 53.676 | 57.180 | 1.00 | 16.97 | C |
| ATOM | 1345 | N | ALA A 177 | 30.810 | 53.887 | 58.622 | 1.00 | 18.65 | N |
| ATOM | 1346 | CA | ALA A 177 | 32.202 | 53.466 | 58.485 | 1.00 | 19.41 | C |
| ATOM | 1347 | C | ALA A 177 | 32.406 | 52.758 | 57.144 | 1.00 | 19.41 | C |
| ATOM | 1348 | O | ALA A 177 | 33.473 | 52.856 | 56.533 | 1.00 | 19.65 | O |
| ATOM | 1349 | CB | ALA A 177 | 32.585 | 52.532 | 59.634 | 1.00 | 16.84 | C |
| ATOM | 1350 | N | GLY A 178 | 31.379 | 52.043 | 56.701 | 1.00 | 17.88 | N |
| ATOM | 1351 | CA | GLY A 178 | 31.453 | 51.328 | 55.441 | 1.00 | 17.66 | C |
| ATOM | 1352 | C | GLY A 178 | 30.074 | 51.203 | 54.823 | 1.00 | 17.80 | C |
| ATOM | 1353 | O | GLY A 178 | 29.077 | 51.239 | 55.538 | 1.00 | 17.88 | O |
| ATOM | 1354 | N | SER A 179 | 30.010 | 51.062 | 53.501 | 1.00 | 17.28 | N |
| ATOM | 1355 | CA | SER A 179 | 28.729 | 50.929 | 52.808 | 1.00 | 19.33 | C |
| ATOM | 1356 | C | SER A 179 | 28.839 | 49.944 | 51.641 | 1.00 | 20.06 | C |
| ATOM | 1357 | O | SER A 179 | 29.864 | 49.899 | 50.963 | 1.00 | 22.41 | O |
| ATOM | 1358 | CB | SER A 179 | 28.257 | 52.300 | 52.295 | 1.00 | 17.94 | C |
| ATOM | 1359 | OG | SER A 179 | 29.205 | 52.895 | 51.416 | 1.00 | 18.86 | O |
| ATOM | 1360 | N | HIS A 180 | 27.795 | 49.148 | 51.414 | 1.00 | 20.35 | N |
| ATOM | 1361 | CA | HIS A 180 | 27.823 | 48.188 | 50.314 | 1.00 | 19.96 | C |
| ATOM | 1362 | C | HIS A 180 | 26.813 | 48.527 | 49.224 | 1.00 | 20.73 | C |
| ATOM | 1363 | O | HIS A 180 | 25.746 | 49.095 | 49.490 | 1.00 | 20.86 | O |
| ATOM | 1364 | CB | HIS A 180 | 27.611 | 46.750 | 50.817 | 1.00 | 18.37 | C |
| ATOM | 1365 | CG | HIS A 180 | 26.270 | 46.493 | 51.428 | 1.00 | 16.71 | C |
| ATOM | 1366 | ND1 | HIS A 180 | 26.098 | 46.290 | 52.780 | 1.00 | 17.78 | N |
| ATOM | 1367 | CD2 | HIS A 180 | 25.053 | 46.308 | 50.865 | 1.00 | 16.59 | C |
| ATOM | 1368 | CE1 | HIS A 180 | 24.837 | 45.984 | 53.022 | 1.00 | 17.50 | C |
| ATOM | 1369 | NE2 | HIS A 180 | 24.180 | 45.988 | 51.876 | 1.00 | 18.61 | N |
| ATOM | 1370 | N | TRP A 181 | 27.169 | 48.171 | 47.993 | 1.00 | 19.32 | N |
| ATOM | 1371 | CA | TRP A 181 | 26.349 | 48.465 | 46.832 | 1.00 | 18.88 | C |
| ATOM | 1372 | C | TRP A 181 | 26.273 | 47.240 | 45.934 | 1.00 | 19.27 | C |
| ATOM | 1373 | O | TRP A 181 | 27.287 | 46.596 | 45.658 | 1.00 | 19.10 | O |
| ATOM | 1374 | CB | TRP A 181 | 26.951 | 49.656 | 46.088 | 1.00 | 16.55 | C |
| ATOM | 1375 | CG | TRP A 181 | 27.358 | 50.742 | 47.022 | 1.00 | 18.15 | C |
| ATOM | 1376 | CD1 | TRP A 181 | 28.462 | 50.753 | 47.834 | 1.00 | 18.45 | C |
| ATOM | 1377 | CD2 | TRP A 181 | 26.619 | 51.933 | 47.335 | 1.00 | 18.90 | C |
| ATOM | 1378 | NE1 | TRP A 181 | 28.451 | 51.871 | 48.634 | 1.00 | 20.18 | N |
| ATOM | 1379 | CE2 | TRP A 181 | 27.333 | 52.613 | 48.350 | 1.00 | 18.38 | C |
| ATOM | 1380 | CE3 | TRP A 181 | 25.422 | 52.489 | 46.859 | 1.00 | 16.17 | C |
| ATOM | 1381 | CZ2 | TRP A 181 | 26.888 | 53.823 | 48.898 | 1.00 | 17.49 | C |
| ATOM | 1382 | CZ3 | TRP A 181 | 24.977 | 53.693 | 47.404 | 1.00 | 14.12 | C |
| ATOM | 1383 | CH2 | TRP A 181 | 25.710 | 54.347 | 48.413 | 1.00 | 17.68 | C |
| ATOM | 1384 | N | GLU A 182 | 25.063 | 46.936 | 45.475 | 1.00 | 18.04 | N |
| ATOM | 1385 | CA | GLU A 182 | 24.810 | 45.760 | 44.652 | 1.00 | 17.12 | C |
| ATOM | 1386 | C | GLU A 182 | 24.548 | 46.080 | 43.193 | 1.00 | 18.47 | C |
| ATOM | 1387 | O | GLU A 182 | 24.053 | 47.157 | 42.859 | 1.00 | 17.30 | O |
| ATOM | 1388 | CB | GLU A 182 | 23.620 | 44.997 | 45.238 | 1.00 | 18.01 | C |
| ATOM | 1389 | CG | GLU A 182 | 22.375 | 45.864 | 45.351 | 1.00 | 17.04 | C |
| ATOM | 1390 | CD | GLU A 182 | 21.455 | 45.456 | 46.478 | 1.00 | 19.06 | C |
| ATOM | 1391 | OE1 | GLU A 182 | 21.957 | 45.150 | 47.587 | 1.00 | 18.40 | O |
| ATOM | 1392 | OE2 | GLU A 182 | 20.222 | 45.467 | 46.260 | 1.00 | 19.60 | O |
| ATOM | 1393 | N | ASP A 183 | 24.863 | 45.121 | 42.328 | 1.00 | 20.35 | N |
| ATOM | 1394 | CA | ASP A 183 | 24.681 | 45.299 | 40.899 | 1.00 | 20.51 | C |
| ATOM | 1395 | C | ASP A 183 | 23.290 | 44.924 | 40.397 | 1.00 | 21.15 | C |
| ATOM | 1396 | O | ASP A 183 | 23.150 | 44.219 | 39.404 | 1.00 | 23.69 | O |
| ATOM | 1397 | CB | ASP A 183 | 25.761 | 44.530 | 40.113 | 1.00 | 19.20 | C |
| ATOM | 1398 | CG | ASP A 183 | 25.874 | 43.063 | 40.516 | 1.00 | 21.76 | C |
| ATOM | 1399 | OD1 | ASP A 183 | 25.019 | 42.555 | 41.278 | 1.00 | 22.81 | O |

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ATOM   1400  OD2 ASP A 183      26.831  42.405  40.051  1.00 20.83           O
ATOM   1401  N   GLN A 184      22.264  45.416  41.082  1.00 21.47           N
ATOM   1402  CA  GLN A 184      20.880  45.163  40.691  1.00 21.52           C
ATOM   1403  C   GLN A 184      20.256  46.438  40.146  1.00 23.01           C
ATOM   1404  O   GLN A 184      20.726  47.536  40.433  1.00 22.75           O
ATOM   1405  CB  GLN A 184      20.040  44.722  41.884  1.00 19.98           C
ATOM   1406  CG  GLN A 184      20.300  43.329  42.393  1.00 20.56           C
ATOM   1407  CD  GLN A 184      19.315  42.944  43.480  1.00 21.60           C
ATOM   1408  OE1 GLN A 184      18.096  42.955  43.264  1.00 18.74           O
ATOM   1409  NE2 GLN A 184      19.834  42.607  44.655  1.00 17.81           N
ATOM   1410  N   LEU A 185      19.190  46.281  39.368  1.00 23.95           N
ATOM   1411  CA  LEU A 185      18.468  47.419  38.815  1.00 24.82           C
ATOM   1412  C   LEU A 185      17.680  48.007  39.985  1.00 24.85           C
ATOM   1413  O   LEU A 185      16.847  47.331  40.582  1.00 25.46           O
ATOM   1414  CB  LEU A 185      17.508  46.957  37.713  1.00 24.59           C
ATOM   1415  CG  LEU A 185      16.521  48.016  37.215  1.00 25.82           C
ATOM   1416  CD1 LEU A 185      17.293  49.174  36.606  1.00 22.55           C
ATOM   1417  CD2 LEU A 185      15.561  47.400  36.199  1.00 24.10           C
ATOM   1418  N   ALA A 186      17.957  49.263  40.308  1.00 24.96           N
ATOM   1419  CA  ALA A 186      17.311  49.938  41.422  1.00 24.75           C
ATOM   1420  C   ALA A 186      15.792  49.813  41.428  1.00 24.46           C
ATOM   1421  O   ALA A 186      15.204  49.452  42.447  1.00 23.04           O
ATOM   1422  CB  ALA A 186      17.716  51.412  41.435  1.00 25.35           C
ATOM   1423  N   SER A 187      15.167  50.101  40.289  1.00 22.34           N
ATOM   1424  CA  SER A 187      13.715  50.038  40.175  1.00 22.88           C
ATOM   1425  C   SER A 187      13.096  48.653  40.402  1.00 22.55           C
ATOM   1426  O   SER A 187      11.903  48.548  40.676  1.00 22.95           O
ATOM   1427  CB  SER A 187      13.271  50.599  38.813  1.00 22.56           C
ATOM   1428  OG  SER A 187      13.851  49.891  37.734  1.00 21.74           O
ATOM   1429  N   GLU A 188      13.900  47.598  40.303  1.00 22.12           N
ATOM   1430  CA  GLU A 188      13.400  46.238  40.508  1.00 22.60           C
ATOM   1431  C   GLU A 188      14.177  45.529  41.616  1.00 24.49           C
ATOM   1432  O   GLU A 188      14.129  44.299  41.739  1.00 24.48           O
ATOM   1433  CB  GLU A 188      13.524  45.423  39.214  1.00 22.83           C
ATOM   1434  CG  GLU A 188      12.667  45.918  38.064  1.00 22.29           C
ATOM   1435  CD  GLU A 188      11.193  45.971  38.419  1.00 24.78           C
ATOM   1436  OE1 GLU A 188      10.716  45.054  39.127  1.00 25.35           O
ATOM   1437  OE2 GLU A 188      10.511  46.921  37.984  1.00 24.61           O
ATOM   1438  N   LYS A 189      14.892  46.311  42.420  1.00 24.63           N
ATOM   1439  CA  LYS A 189      15.702  45.770  43.502  1.00 24.06           C
ATOM   1440  C   LYS A 189      14.986  44.686  44.288  1.00 24.20           C
ATOM   1441  O   LYS A 189      13.826  44.835  44.666  1.00 24.62           O
ATOM   1442  CB  LYS A 189      16.149  46.895  44.444  1.00 23.76           C
ATOM   1443  CG  LYS A 189      17.112  46.468  45.553  1.00 22.31           C
ATOM   1444  CD  LYS A 189      16.376  45.897  46.754  1.00 23.38           C
ATOM   1445  CE  LYS A 189      17.278  45.806  47.984  1.00 24.38           C
ATOM   1446  NZ  LYS A 189      18.366  44.802  47.819  1.00 23.96           N
ATOM   1447  N   LYS A 190      15.691  43.589  44.521  1.00 24.64           N
ATOM   1448  CA  LYS A 190      15.146  42.474  45.269  1.00 26.35           C
ATOM   1449  C   LYS A 190      16.102  42.082  46.370  1.00 27.42           C
ATOM   1450  O   LYS A 190      17.306  42.332  46.294  1.00 27.90           O
ATOM   1451  CB  LYS A 190      14.937  41.255  44.372  1.00 26.91           C
ATOM   1452  CG  LYS A 190      13.876  41.407  43.309  1.00 29.42           C
ATOM   1453  CD  LYS A 190      12.512  41.682  43.908  1.00 26.61           C
ATOM   1454  CE  LYS A 190      11.463  41.648  42.820  1.00 29.48           C
ATOM   1455  NZ  LYS A 190      11.806  42.553  41.691  1.00 29.43           N
ATOM   1456  N   SER A 191      15.554  41.461  47.403  1.00 28.62           N
ATOM   1457  CA  SER A 191      16.365  40.978  48.503  1.00 27.51           C
ATOM   1458  C   SER A 191      17.265  39.926  47.855  1.00 25.78           C
ATOM   1459  O   SER A 191      16.864  39.288  46.883  1.00 25.68           O
ATOM   1460  CB  SER A 191      15.464  40.330  49.547  1.00 29.26           C
ATOM   1461  OG  SER A 191      16.201  39.945  50.683  1.00 34.01           O
ATOM   1462  N   GLY A 192      18.470  39.750  48.380  1.00 23.33           N
ATOM   1463  CA  GLY A 192      19.389  38.780  47.814  1.00 23.31           C
ATOM   1464  C   GLY A 192      18.825  37.376  47.687  1.00 24.25           C
ATOM   1465  O   GLY A 192      19.222  36.619  46.793  1.00 24.19           O
ATOM   1466  N   HIS A 193      17.887  37.027  48.562  1.00 23.14           N
ATOM   1467  CA  HIS A 193      17.298  35.697  48.543  1.00 23.67           C
ATOM   1468  C   HIS A 193      15.840  35.628  48.087  1.00 23.79           C
ATOM   1469  O   HIS A 193      15.113  34.687  48.414  1.00 23.79           O
ATOM   1470  CB  HIS A 193      17.496  35.050  49.915  1.00 22.55           C
ATOM   1471  CG  HIS A 193      18.928  35.047  50.348  1.00 25.26           C
ATOM   1472  ND1 HIS A 193      19.448  35.990  51.210  1.00 23.91           N
ATOM   1473  CD2 HIS A 193      19.981  34.306  49.924  1.00 23.73           C
ATOM   1474  CE1 HIS A 193      20.757  35.834  51.293  1.00 24.73           C
ATOM   1475  NE2 HIS A 193      21.105  34.819  50.521  1.00 23.74           N
ATOM   1476  N   LEU A 194      15.426  36.637  47.326  1.00 23.20           N
ATOM   1477  CA  LEU A 194      14.086  36.690  46.754  1.00 23.08           C
ATOM   1478  C   LEU A 194      14.300  36.504  45.258  1.00 24.47           C
ATOM   1479  O   LEU A 194      15.396  36.762  44.751  1.00 23.97           O
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ATOM   1480  CB   LEU A 194      13.423  38.045  47.009  1.00 21.16           C
ATOM   1481  CG   LEU A 194      12.894  38.346  48.420  1.00 24.21           C
ATOM   1482  CD1  LEU A 194      12.279  39.752  48.455  1.00 21.37           C
ATOM   1483  CD2  LEU A 194      11.864  37.301  48.818  1.00 18.98           C
ATOM   1484  N    GLY A 195      13.269  36.056  44.550  1.00 25.78           N
ATOM   1485  CA   GLY A 195      13.403  35.856  43.116  1.00 26.90           C
ATOM   1486  C    GLY A 195      13.125  37.123  42.330  1.00 27.40           C
ATOM   1487  O    GLY A 195      12.874  38.179  42.916  1.00 28.81           O
ATOM   1488  N    GLY A 196      13.188  37.020  41.006  1.00 26.59           N
ATOM   1489  CA   GLY A 196      12.918  38.161  40.148  1.00 25.51           C
ATOM   1490  C    GLY A 196      13.969  39.251  40.139  1.00 25.09           C
ATOM   1491  O    GLY A 196      13.660  40.409  39.857  1.00 25.50           O
ATOM   1492  N    LYS A 197      15.211  38.891  40.440  1.00 24.06           N
ATOM   1493  CA   LYS A 197      16.297  39.863  40.461  1.00 22.44           C
ATOM   1494  C    LYS A 197      16.782  40.198  39.060  1.00 21.69           C
ATOM   1495  O    LYS A 197      16.874  39.318  38.198  1.00 22.54           O
ATOM   1496  CB   LYS A 197      17.474  39.341  41.296  1.00 20.26           C
ATOM   1497  CG   LYS A 197      17.107  39.056  42.748  1.00 22.53           C
ATOM   1498  CD   LYS A 197      18.320  38.891  43.665  1.00 20.81           C
ATOM   1499  CE   LYS A 197      19.198  37.713  43.281  1.00 18.60           C
ATOM   1500  NZ   LYS A 197      20.236  37.484  44.324  1.00 18.50           N
ATOM   1501  N    VAL A 198      17.090  41.476  38.844  1.00 20.25           N
ATOM   1502  CA   VAL A 198      17.589  41.955  37.561  1.00 18.57           C
ATOM   1503  C    VAL A 198      18.948  42.622  37.746  1.00 19.78           C
ATOM   1504  O    VAL A 198      19.083  43.577  38.519  1.00 19.62           O
ATOM   1505  CB   VAL A 198      16.640  42.999  36.925  1.00 18.76           C
ATOM   1506  CG1  VAL A 198      17.182  43.410  35.550  1.00 16.43           C
ATOM   1507  CG2  VAL A 198      15.225  42.436  36.811  1.00 15.25           C
ATOM   1508  N    LEU A 199      19.955  42.121  37.037  1.00 19.69           N
ATOM   1509  CA   LEU A 199      21.296  42.688  37.124  1.00 19.61           C
ATOM   1510  C    LEU A 199      21.434  43.862  36.161  1.00 20.09           C
ATOM   1511  O    LEU A 199      20.667  43.992  35.208  1.00 20.23           O
ATOM   1512  CB   LEU A 199      22.351  41.644  36.752  1.00 18.69           C
ATOM   1513  CG   LEU A 199      22.457  40.330  37.529  1.00 19.08           C
ATOM   1514  CD1  LEU A 199      23.484  39.439  36.840  1.00 16.57           C
ATOM   1515  CD2  LEU A 199      22.847  40.599  38.974  1.00 16.79           C
ATOM   1516  N    ILE A 200      22.406  44.724  36.431  1.00 20.46           N
ATOM   1517  CA   ILE A 200      22.696  45.850  35.557  1.00 20.97           C
ATOM   1518  C    ILE A 200      24.067  45.535  34.951  1.00 21.10           C
ATOM   1519  O    ILE A 200      24.794  44.678  35.465  1.00 20.26           O
ATOM   1520  CB   ILE A 200      22.709  47.200  36.335  1.00 21.70           C
ATOM   1521  CG1  ILE A 200      23.388  47.041  37.698  1.00 21.67           C
ATOM   1522  CG2  ILE A 200      21.285  47.702  36.514  1.00 20.09           C
ATOM   1523  CD1  ILE A 200      24.886  47.145  37.651  1.00 26.84           C
ATOM   1524  N    PRO A 201      24.427  46.184  33.832  1.00 21.78           N
ATOM   1525  CA   PRO A 201      25.736  45.901  33.223  1.00 21.85           C
ATOM   1526  C    PRO A 201      26.911  46.037  34.197  1.00 21.15           C
ATOM   1527  O    PRO A 201      26.880  46.857  35.117  1.00 21.65           O
ATOM   1528  CB   PRO A 201      25.810  46.911  32.080  1.00 19.98           C
ATOM   1529  CG   PRO A 201      24.375  47.046  31.674  1.00 20.46           C
ATOM   1530  CD   PRO A 201      23.653  47.127  33.005  1.00 20.32           C
ATOM   1531  N    THR A 202      27.944  45.227  33.989  1.00 21.05           N
ATOM   1532  CA   THR A 202      29.131  45.257  34.840  1.00 20.79           C
ATOM   1533  C    THR A 202      29.712  46.669  34.957  1.00 22.27           C
ATOM   1534  O    THR A 202      30.083  47.114  36.048  1.00 22.39           O
ATOM   1535  CB   THR A 202      30.225  44.306  34.293  1.00 20.77           C
ATOM   1536  OG1  THR A 202      29.821  42.944  34.495  1.00 19.64           O
ATOM   1537  CG2  THR A 202      31.561  44.553  34.991  1.00 19.95           C
ATOM   1538  N    GLN A 203      29.783  47.375  33.834  1.00 21.88           N
ATOM   1539  CA   GLN A 203      30.332  48.719  33.837  1.00 23.41           C
ATOM   1540  C    GLN A 203      29.441  49.675  34.611  1.00 24.47           C
ATOM   1541  O    GLN A 203      29.926  50.646  35.203  1.00 24.29           O
ATOM   1542  CB   GLN A 203      30.520  49.222  32.406  1.00 23.95           C
ATOM   1543  CG   GLN A 203      31.228  50.576  32.293  1.00 26.83           C
ATOM   1544  CD   GLN A 203      32.620  50.587  32.922  1.00 27.50           C
ATOM   1545  OE1  GLN A 203      33.382  49.628  32.797  1.00 28.19           O
ATOM   1546  NE2  GLN A 203      32.957  51.685  33.591  1.00 26.34           N
ATOM   1547  N    GLN A 204      28.139  49.404  34.627  1.00 23.24           N
ATOM   1548  CA   GLN A 204      27.238  50.290  35.342  1.00 21.36           C
ATOM   1549  C    GLN A 204      27.511  50.206  36.833  1.00 20.54           C
ATOM   1550  O    GLN A 204      27.465  51.214  37.535  1.00 20.08           O
ATOM   1551  CB   GLN A 204      25.773  49.949  35.057  1.00 21.83           C
ATOM   1552  CG   GLN A 204      24.811  51.056  35.481  1.00 21.76           C
ATOM   1553  CD   GLN A 204      23.378  50.794  35.052  1.00 22.45           C
ATOM   1554  OE1  GLN A 204      23.121  50.387  33.917  1.00 21.80           O
ATOM   1555  NE2  GLN A 204      22.436  51.042  35.953  1.00 22.01           N
ATOM   1556  N    HIS A 205      27.809  49.010  37.329  1.00 20.48           N
ATOM   1557  CA   HIS A 205      28.082  48.908  38.748  1.00 20.78           C
ATOM   1558  C    HIS A 205      29.432  49.515  39.094  1.00 20.71           C
ATOM   1559  O    HIS A 205      29.646  49.955  40.223  1.00 20.18           O
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ATOM   1560  CB  HIS A 205      28.037  47.471  39.244  1.00 20.81           C
ATOM   1561  CG  HIS A 205      27.848  47.379  40.723  1.00 19.47           C
ATOM   1562  ND1 HIS A 205      28.540  46.488  41.513  1.00 20.99           N
ATOM   1563  CD2 HIS A 205      27.054  48.089  41.559  1.00 17.02           C
ATOM   1564  CE1 HIS A 205      28.181  46.654  42.774  1.00 21.41           C
ATOM   1565  NE2 HIS A 205      27.281  47.620  42.829  1.00 19.64           N
ATOM   1566  N   ILE A 206      30.345  49.534  38.126  1.00 21.80           N
ATOM   1567  CA  ILE A 206      31.652  50.136  38.350  1.00 20.93           C
ATOM   1568  C   ILE A 206      31.422  51.644  38.476  1.00 21.29           C
ATOM   1569  O   ILE A 206      32.085  52.317  39.267  1.00 22.65           O
ATOM   1570  CB  ILE A 206      32.636  49.819  37.185  1.00 21.17           C
ATOM   1571  CG1 ILE A 206      33.168  48.387  37.329  1.00 20.80           C
ATOM   1572  CG2 ILE A 206      33.807  50.799  37.186  1.00 20.11           C
ATOM   1573  CD1 ILE A 206      34.004  47.913  36.137  1.00 22.99           C
ATOM   1574  N   ARG A 207      30.478  52.181  37.707  1.00 20.67           N
ATOM   1575  CA  ARG A 207      30.188  53.605  37.824  1.00 22.03           C
ATOM   1576  C   ARG A 207      29.643  53.859  39.230  1.00 20.00           C
ATOM   1577  O   ARG A 207      29.941  54.885  39.843  1.00 18.98           O
ATOM   1578  CB  ARG A 207      29.167  54.065  36.779  1.00 24.31           C
ATOM   1579  CG  ARG A 207      29.763  54.316  35.395  1.00 29.77           C
ATOM   1580  CD  ARG A 207      28.840  55.190  34.534  1.00 33.71           C
ATOM   1581  NE  ARG A 207      27.619  54.501  34.114  1.00 35.68           N
ATOM   1582  CZ  ARG A 207      27.567  53.595  33.141  1.00 36.11           C
ATOM   1583  NH1 ARG A 207      28.666  53.265  32.480  1.00 36.88           N
ATOM   1584  NH2 ARG A 207      26.418  53.017  32.829  1.00 37.10           N
ATOM   1585  N   THR A 208      28.856  52.917  39.741  1.00 15.75           N
ATOM   1586  CA  THR A 208      28.304  53.048  41.087  1.00 18.04           C
ATOM   1587  C   THR A 208      29.412  53.052  42.143  1.00 17.64           C
ATOM   1588  O   THR A 208      29.460  53.933  42.997  1.00 19.13           O
ATOM   1589  CB  THR A 208      27.301  51.910  41.394  1.00 17.49           C
ATOM   1590  OG1 THR A 208      26.048  52.198  40.757  1.00 18.31           O
ATOM   1591  CG2 THR A 208      27.090  51.757  42.891  1.00 16.08           C
ATOM   1592  N   LEU A 209      30.308  52.075  42.083  1.00 18.21           N
ATOM   1593  CA  LEU A 209      31.400  52.013  43.047  1.00 18.30           C
ATOM   1594  C   LEU A 209      32.266  53.266  42.941  1.00 18.72           C
ATOM   1595  O   LEU A 209      32.705  53.809  43.951  1.00 20.13           O
ATOM   1596  CB  LEU A 209      32.236  50.759  42.808  1.00 16.73           C
ATOM   1597  CG  LEU A 209      31.437  49.462  42.969  1.00 15.15           C
ATOM   1598  CD1 LEU A 209      32.254  48.275  42.497  1.00 16.06           C
ATOM   1599  CD2 LEU A 209      31.029  49.304  44.427  1.00 15.69           C
ATOM   1600  N   THR A 210      32.486  53.732  41.714  1.00 19.92           N
ATOM   1601  CA  THR A 210      33.284  54.927  41.469  1.00 19.39           C
ATOM   1602  C   THR A 210      32.594  56.123  42.126  1.00 21.00           C
ATOM   1603  O   THR A 210      33.238  56.969  42.751  1.00 23.24           O
ATOM   1604  CB  THR A 210      33.423  55.193  39.946  1.00 18.72           C
ATOM   1605  OG1 THR A 210      34.166  54.132  39.338  1.00 18.32           O
ATOM   1606  CG2 THR A 210      34.129  56.508  39.685  1.00 18.58           C
ATOM   1607  N   SER A 211      31.276  56.183  41.981  1.00 20.29           N
ATOM   1608  CA  SER A 211      30.488  57.267  42.556  1.00 20.26           C
ATOM   1609  C   SER A 211      30.531  57.213  44.089  1.00 20.32           C
ATOM   1610  O   SER A 211      30.616  58.251  44.753  1.00 20.05           O
ATOM   1611  CB  SER A 211      29.041  57.176  42.063  1.00 18.88           C
ATOM   1612  OG  SER A 211      28.279  58.277  42.514  1.00 20.24           O
ATOM   1613  N   ALA A 212      30.476  56.007  44.649  1.00 17.95           N
ATOM   1614  CA  ALA A 212      30.520  55.861  46.100  1.00 20.55           C
ATOM   1615  C   ALA A 212      31.872  56.341  46.607  1.00 20.63           C
ATOM   1616  O   ALA A 212      31.960  56.957  47.667  1.00 21.23           O
ATOM   1617  CB  ALA A 212      30.305  54.407  46.506  1.00 18.18           C
ATOM   1618  N   ARG A 213      32.923  56.053  45.847  1.00 20.82           N
ATOM   1619  CA  ARG A 213      34.264  56.469  46.238  1.00 20.46           C
ATOM   1620  C   ARG A 213      34.406  57.982  46.146  1.00 19.37           C
ATOM   1621  O   ARG A 213      34.931  58.617  47.063  1.00 20.12           O
ATOM   1622  CB  ARG A 213      35.320  55.817  45.348  1.00 20.32           C
ATOM   1623  CG  ARG A 213      36.740  56.097  45.809  1.00 22.72           C
ATOM   1624  CD  ARG A 213      37.053  55.352  47.098  1.00 21.64           C
ATOM   1625  NE  ARG A 213      37.273  53.936  46.824  1.00 25.88           N
ATOM   1626  CZ  ARG A 213      37.334  52.987  47.755  1.00 27.83           C
ATOM   1627  NH1 ARG A 213      37.188  53.298  49.044  1.00 24.14           N
ATOM   1628  NH2 ARG A 213      37.538  51.725  47.389  1.00 23.16           N
ATOM   1629  N   LEU A 214      33.945  58.556  45.037  1.00 18.71           N
ATOM   1630  CA  LEU A 214      34.026  60.000  44.840  1.00 18.60           C
ATOM   1631  C   LEU A 214      33.360  60.768  45.986  1.00 20.44           C
ATOM   1632  O   LEU A 214      33.910  61.758  46.480  1.00 23.46           O
ATOM   1633  CB  LEU A 214      33.381  60.391  43.507  1.00 15.44           C
ATOM   1634  CG  LEU A 214      33.341  61.894  43.191  1.00 15.51           C
ATOM   1635  CD1 LEU A 214      34.764  62.431  43.094  1.00 12.84           C
ATOM   1636  CD2 LEU A 214      32.592  62.140  41.883  1.00 13.20           C
ATOM   1637  N   ALA A 215      32.182  60.314  46.412  1.00 20.32           N
ATOM   1638  CA  ALA A 215      31.463  60.966  47.504  1.00 19.31           C
ATOM   1639  C   ALA A 215      32.314  60.941  48.764  1.00 18.44           C
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| ATOM | 1640 | O | ALA A 215 | 32.421 | 61.943 | 49.473 | 1.00 17.73 | O |
|------|------|-----|-----------|--------|--------|--------|-----------|---|
| ATOM | 1641 | CB | ALA A 215 | 30.116 | 60.264 | 47.762 | 1.00 18.29 | C |
| ATOM | 1642 | N | ALA A 216 | 32.916 | 59.789 | 49.044 | 1.00 19.51 | N |
| ATOM | 1643 | CA | ALA A 216 | 33.773 | 59.648 | 50.222 | 1.00 20.64 | C |
| ATOM | 1644 | C | ALA A 216 | 34.963 | 60.615 | 50.149 | 1.00 22.06 | C |
| ATOM | 1645 | O | ALA A 216 | 35.274 | 61.290 | 51.131 | 1.00 24.25 | O |
| ATOM | 1646 | CB | ALA A 216 | 34.270 | 58.208 | 50.349 | 1.00 18.31 | C |
| ATOM | 1647 | N | ASP A 217 | 35.613 | 60.696 | 48.986 | 1.00 21.36 | N |
| ATOM | 1648 | CA | ASP A 217 | 36.767 | 61.590 | 48.814 | 1.00 20.87 | C |
| ATOM | 1649 | C | ASP A 217 | 36.389 | 63.057 | 48.962 | 1.00 21.03 | C |
| ATOM | 1650 | O | ASP A 217 | 37.139 | 63.833 | 49.544 | 1.00 21.92 | O |
| ATOM | 1651 | CB | ASP A 217 | 37.431 | 61.397 | 47.438 | 1.00 19.72 | C |
| ATOM | 1652 | CG | ASP A 217 | 38.072 | 60.029 | 47.279 | 1.00 19.02 | C |
| ATOM | 1653 | OD1 | ASP A 217 | 38.481 | 59.430 | 48.293 | 1.00 21.50 | O |
| ATOM | 1654 | OD2 | ASP A 217 | 38.185 | 59.555 | 46.133 | 1.00 21.67 | O |
| ATOM | 1655 | N | VAL A 218 | 35.236 | 63.436 | 48.420 | 1.00 20.37 | N |
| ATOM | 1656 | CA | VAL A 218 | 34.776 | 64.820 | 48.495 | 1.00 19.91 | C |
| ATOM | 1657 | C | VAL A 218 | 34.397 | 65.170 | 49.935 | 1.00 20.14 | C |
| ATOM | 1658 | O | VAL A 218 | 34.449 | 66.331 | 50.343 | 1.00 19.85 | O |
| ATOM | 1659 | CB | VAL A 218 | 33.568 | 65.051 | 47.547 | 1.00 21.26 | C |
| ATOM | 1660 | CG1 | VAL A 218 | 32.966 | 66.443 | 47.768 | 1.00 18.63 | C |
| ATOM | 1661 | CG2 | VAL A 218 | 34.020 | 64.895 | 46.103 | 1.00 16.55 | C |
| ATOM | 1662 | N | ALA A 219 | 34.020 | 64.152 | 50.697 | 1.00 20.35 | N |
| ATOM | 1663 | CA | ALA A 219 | 33.655 | 64.325 | 52.096 | 1.00 21.83 | C |
| ATOM | 1664 | C | ALA A 219 | 34.924 | 64.118 | 52.921 | 1.00 22.37 | C |
| ATOM | 1665 | O | ALA A 219 | 34.897 | 64.144 | 54.151 | 1.00 24.27 | O |
| ATOM | 1666 | CB | ALA A 219 | 32.588 | 63.301 | 52.497 | 1.00 20.03 | C |
| ATOM | 1667 | N | ASP A 220 | 36.031 | 63.894 | 52.218 | 1.00 21.94 | N |
| ATOM | 1668 | CA | ASP A 220 | 37.341 | 63.684 | 52.826 | 1.00 22.23 | C |
| ATOM | 1669 | C | ASP A 220 | 37.410 | 62.638 | 53.949 | 1.00 21.14 | C |
| ATOM | 1670 | O | ASP A 220 | 37.914 | 62.918 | 55.033 | 1.00 22.39 | O |
| ATOM | 1671 | CB | ASP A 220 | 37.910 | 65.036 | 53.310 | 1.00 23.13 | C |
| ATOM | 1672 | CG | ASP A 220 | 39.327 | 64.917 | 53.872 | 1.00 25.75 | C |
| ATOM | 1673 | OD1 | ASP A 220 | 40.155 | 64.181 | 53.288 | 1.00 26.11 | O |
| ATOM | 1674 | OD2 | ASP A 220 | 39.617 | 65.570 | 54.898 | 1.00 26.49 | O |
| ATOM | 1675 | N | VAL A 221 | 36.909 | 61.432 | 53.686 | 1.00 21.05 | N |
| ATOM | 1676 | CA | VAL A 221 | 36.970 | 60.338 | 54.660 | 1.00 20.14 | C |
| ATOM | 1677 | C | VAL A 221 | 37.218 | 59.025 | 53.925 | 1.00 21.00 | C |
| ATOM | 1678 | O | VAL A 221 | 36.707 | 58.811 | 52.824 | 1.00 23.36 | O |
| ATOM | 1679 | CB | VAL A 221 | 35.665 | 60.215 | 55.520 | 1.00 20.86 | C |
| ATOM | 1680 | CG1 | VAL A 221 | 35.564 | 61.385 | 56.487 | 1.00 18.42 | C |
| ATOM | 1681 | CG2 | VAL A 221 | 34.434 | 60.159 | 54.622 | 1.00 20.49 | C |
| ATOM | 1682 | N | PRO A 222 | 38.017 | 58.128 | 54.520 | 1.00 21.13 | N |
| ATOM | 1683 | CA | PRO A 222 | 38.358 | 56.821 | 53.941 | 1.00 20.44 | C |
| ATOM | 1684 | C | PRO A 222 | 37.289 | 55.734 | 54.089 | 1.00 20.31 | C |
| ATOM | 1685 | O | PRO A 222 | 37.607 | 54.599 | 54.459 | 1.00 19.29 | O |
| ATOM | 1686 | CB | PRO A 222 | 39.635 | 56.453 | 54.687 | 1.00 20.84 | C |
| ATOM | 1687 | CG | PRO A 222 | 39.354 | 56.983 | 56.059 | 1.00 20.66 | C |
| ATOM | 1688 | CD | PRO A 222 | 38.790 | 58.362 | 55.755 | 1.00 21.38 | C |
| ATOM | 1689 | N | THR A 223 | 36.035 | 56.072 | 53.786 | 1.00 20.33 | N |
| ATOM | 1690 | CA | THR A 223 | 34.917 | 55.124 | 53.909 | 1.00 18.76 | C |
| ATOM | 1691 | C | THR A 223 | 35.165 | 53.777 | 53.224 | 1.00 19.98 | C |
| ATOM | 1692 | O | THR A 223 | 35.538 | 53.726 | 52.048 | 1.00 21.27 | O |
| ATOM | 1693 | CB | THR A 223 | 33.620 | 55.704 | 53.308 | 1.00 17.48 | C |
| ATOM | 1694 | OG1 | THR A 223 | 33.412 | 57.030 | 53.799 | 1.00 17.86 | O |
| ATOM | 1695 | CG2 | THR A 223 | 32.426 | 54.841 | 53.692 | 1.00 17.28 | C |
| ATOM | 1696 | N | VAL A 224 | 34.938 | 52.687 | 53.952 | 1.00 18.95 | N |
| ATOM | 1697 | CA | VAL A 224 | 35.123 | 51.351 | 53.387 | 1.00 19.20 | C |
| ATOM | 1698 | C | VAL A 224 | 34.023 | 51.053 | 52.361 | 1.00 21.33 | C |
| ATOM | 1699 | O | VAL A 224 | 32.836 | 51.048 | 52.698 | 1.00 22.07 | O |
| ATOM | 1700 | CB | VAL A 224 | 35.120 | 50.278 | 54.510 | 1.00 17.91 | C |
| ATOM | 1701 | CG1 | VAL A 224 | 35.071 | 48.875 | 53.921 | 1.00 15.22 | C |
| ATOM | 1702 | CG2 | VAL A 224 | 36.382 | 50.427 | 55.352 | 1.00 19.03 | C |
| ATOM | 1703 | N | VAL A 225 | 34.422 | 50.819 | 51.109 | 1.00 22.11 | N |
| ATOM | 1704 | CA | VAL A 225 | 33.473 | 50.540 | 50.031 | 1.00 20.17 | C |
| ATOM | 1705 | C | VAL A 225 | 33.384 | 49.056 | 49.703 | 1.00 22.10 | C |
| ATOM | 1706 | O | VAL A 225 | 34.372 | 48.425 | 49.335 | 1.00 21.81 | O |
| ATOM | 1707 | CB | VAL A 225 | 33.836 | 51.325 | 48.750 | 1.00 21.12 | C |
| ATOM | 1708 | CG1 | VAL A 225 | 32.850 | 51.006 | 47.633 | 1.00 16.75 | C |
| ATOM | 1709 | CG2 | VAL A 225 | 33.824 | 52.820 | 49.042 | 1.00 19.75 | C |
| ATOM | 1710 | N | ILE A 226 | 32.177 | 48.514 | 49.831 | 1.00 22.22 | N |
| ATOM | 1711 | CA | ILE A 226 | 31.918 | 47.104 | 49.586 | 1.00 20.98 | C |
| ATOM | 1712 | C | ILE A 226 | 31.101 | 46.881 | 48.323 | 1.00 22.41 | C |
| ATOM | 1713 | O | ILE A 226 | 30.050 | 47.500 | 48.135 | 1.00 21.56 | O |
| ATOM | 1714 | CB | ILE A 226 | 31.164 | 46.488 | 50.776 | 1.00 21.18 | C |
| ATOM | 1715 | CG1 | ILE A 226 | 31.981 | 46.694 | 52.049 | 1.00 20.41 | C |
| ATOM | 1716 | CG2 | ILE A 226 | 30.890 | 45.007 | 50.531 | 1.00 18.59 | C |
| ATOM | 1717 | CD1 | ILE A 226 | 31.218 | 46.380 | 53.312 | 1.00 23.72 | C |
| ATOM | 1718 | N | ALA A 227 | 31.592 | 45.982 | 47.471 | 1.00 21.79 | N |
| ATOM | 1719 | CA | ALA A 227 | 30.938 | 45.648 | 46.216 | 1.00 20.69 | C |

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ATOM   1720  C    ALA A 227      30.207  44.319  46.345  1.00 20.12           C
ATOM   1721  O    ALA A 227      30.792  43.315  46.742  1.00 18.85           O
ATOM   1722  CB   ALA A 227      31.971  45.568  45.099  1.00 24.03           C
ATOM   1723  N    ARG A 228      28.925  44.316  45.998  1.00 19.72           N
ATOM   1724  CA   ARG A 228      28.115  43.111  46.086  1.00 19.94           C
ATOM   1725  C    ARG A 228      27.546  42.697  44.739  1.00 20.64           C
ATOM   1726  O    ARG A 228      27.097  43.538  43.962  1.00 20.48           O
ATOM   1727  CB   ARG A 228      26.963  43.326  47.077  1.00 20.36           C
ATOM   1728  CG   ARG A 228      25.791  42.369  46.877  1.00 21.81           C
ATOM   1729  CD   ARG A 228      24.688  42.567  47.924  1.00 22.62           C
ATOM   1730  NE   ARG A 228      23.393  42.110  47.424  1.00 20.73           N
ATOM   1731  CZ   ARG A 228      22.316  41.930  48.175  1.00 20.13           C
ATOM   1732  NH1  ARG A 228      22.368  42.164  49.478  1.00 19.21           N
ATOM   1733  NH2  ARG A 228      21.182  41.523  47.617  1.00 20.20           N
ATOM   1734  N    THR A 229      27.568  41.398  44.462  1.00 20.35           N
ATOM   1735  CA   THR A 229      27.014  40.900  43.215  1.00 20.27           C
ATOM   1736  C    THR A 229      25.889  39.920  43.500  1.00 19.60           C
ATOM   1737  O    THR A 229      25.975  39.105  44.414  1.00 19.04           O
ATOM   1738  CB   THR A 229      28.067  40.193  42.337  1.00 21.42           C
ATOM   1739  OG1  THR A 229      27.468  39.848  41.078  1.00 21.21           O
ATOM   1740  CG2  THR A 229      28.576  38.917  43.017  1.00 22.30           C
ATOM   1741  N    ASP A 230      24.831  40.021  42.709  1.00 19.60           N
ATOM   1742  CA   ASP A 230      23.664  39.166  42.841  1.00 22.30           C
ATOM   1743  C    ASP A 230      23.550  38.224  41.652  1.00 23.13           C
ATOM   1744  O    ASP A 230      22.487  37.657  41.400  1.00 24.37           O
ATOM   1745  CB   ASP A 230      22.411  40.038  42.934  1.00 21.81           C
ATOM   1746  CG   ASP A 230      22.189  40.580  44.327  1.00 22.47           C
ATOM   1747  OD1  ASP A 230      21.595  39.844  45.141  1.00 18.62           O
ATOM   1748  OD2  ASP A 230      22.619  41.724  44.608  1.00 18.77           O
ATOM   1749  N    ALA A 231      24.654  38.059  40.927  1.00 25.05           N
ATOM   1750  CA   ALA A 231      24.687  37.205  39.740  1.00 25.35           C
ATOM   1751  C    ALA A 231      24.576  35.708  40.018  1.00 25.67           C
ATOM   1752  O    ALA A 231      24.450  34.917  39.085  1.00 25.82           O
ATOM   1753  CB   ALA A 231      25.959  37.484  38.936  1.00 26.25           C
ATOM   1754  N    GLU A 232      24.622  35.318  41.288  1.00 24.94           N
ATOM   1755  CA   GLU A 232      24.529  33.906  41.648  1.00 26.37           C
ATOM   1756  C    GLU A 232      23.152  33.331  41.305  1.00 26.39           C
ATOM   1757  O    GLU A 232      23.053  32.231  40.759  1.00 24.54           O
ATOM   1758  CB   GLU A 232      24.817  33.725  43.144  1.00 28.78           C
ATOM   1759  CG   GLU A 232      25.167  32.301  43.577  1.00 31.45           C
ATOM   1760  CD   GLU A 232      23.961  31.396  43.735  1.00 32.12           C
ATOM   1761  OE1  GLU A 232      23.022  31.769  44.460  1.00 34.25           O
ATOM   1762  OE2  GLU A 232      23.956  30.301  43.143  1.00 35.08           O
ATOM   1763  N    ALA A 233      22.092  34.080  41.607  1.00 25.33           N
ATOM   1764  CA   ALA A 233      20.734  33.609  41.331  1.00 25.18           C
ATOM   1765  C    ALA A 233      19.990  34.423  40.268  1.00 25.07           C
ATOM   1766  O    ALA A 233      19.026  33.942  39.677  1.00 25.79           O
ATOM   1767  CB   ALA A 233      19.924  33.578  42.623  1.00 22.80           C
ATOM   1768  N    ALA A 234      20.438  35.647  40.013  1.00 25.89           N
ATOM   1769  CA   ALA A 234      19.775  36.493  39.021  1.00 25.44           C
ATOM   1770  C    ALA A 234      19.837  35.884  37.623  1.00 26.42           C
ATOM   1771  O    ALA A 234      20.919  35.541  37.135  1.00 26.38           O
ATOM   1772  CB   ALA A 234      20.405  37.880  39.012  1.00 24.54           C
ATOM   1773  N    THR A 235      18.674  35.755  36.987  1.00 25.28           N
ATOM   1774  CA   THR A 235      18.591  35.197  35.639  1.00 24.75           C
ATOM   1775  C    THR A 235      18.186  36.255  34.613  1.00 25.36           C
ATOM   1776  O    THR A 235      17.837  35.928  33.476  1.00 25.43           O
ATOM   1777  CB   THR A 235      17.577  34.033  35.562  1.00 25.06           C
ATOM   1778  OG1  THR A 235      16.278  34.494  35.952  1.00 25.22           O
ATOM   1779  CG2  THR A 235      18.004  32.895  36.470  1.00 24.89           C
ATOM   1780  N    LEU A 236      18.235  37.521  35.019  1.00 24.41           N
ATOM   1781  CA   LEU A 236      17.888  38.630  34.139  1.00 23.25           C
ATOM   1782  C    LEU A 236      18.896  39.768  34.259  1.00 22.99           C
ATOM   1783  O    LEU A 236      19.455  40.006  35.329  1.00 23.57           O
ATOM   1784  CB   LEU A 236      16.496  39.158  34.480  1.00 24.80           C
ATOM   1785  CG   LEU A 236      15.329  38.198  34.247  1.00 25.74           C
ATOM   1786  CD1  LEU A 236      14.056  38.778  34.836  1.00 26.36           C
ATOM   1787  CD2  LEU A 236      15.171  37.950  32.758  1.00 24.39           C
ATOM   1788  N    ILE A 237      19.130  40.465  33.155  1.00 21.98           N
ATOM   1789  CA   ILE A 237      20.049  41.591  33.149  1.00 21.04           C
ATOM   1790  C    ILE A 237      19.391  42.640  32.272  1.00 22.59           C
ATOM   1791  O    ILE A 237      18.672  42.297  31.330  1.00 21.33           O
ATOM   1792  CB   ILE A 237      21.447  41.186  32.602  1.00 20.63           C
ATOM   1793  CG1  ILE A 237      22.409  42.368  32.714  1.00 20.14           C
ATOM   1794  CG2  ILE A 237      21.340  40.698  31.171  1.00 20.78           C
ATOM   1795  CD1  ILE A 237      23.846  42.020  32.396  1.00 18.49           C
ATOM   1796  N    THR A 238      19.602  43.915  32.591  1.00 22.86           N
ATOM   1797  CA   THR A 238      18.970  44.981  31.822  1.00 24.02           C
ATOM   1798  C    THR A 238      19.473  45.101  30.397  1.00 24.62           C
ATOM   1799  O    THR A 238      18.695  45.380  29.487  1.00 25.30           O
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ATOM   1800  CB   THR A 238     19.137  46.367  32.493  1.00 23.69        C
ATOM   1801  OG1  THR A 238     20.528  46.655  32.660  1.00 23.61        O
ATOM   1802  CG2  THR A 238     18.431  46.404  33.844  1.00 22.99        C
ATOM   1803  N    SER A 239     20.766  44.888  30.192  1.00 25.47        N
ATOM   1804  CA   SER A 239     21.322  45.030  28.855  1.00 26.38        C
ATOM   1805  C    SER A 239     22.502  44.109  28.567  1.00 26.71        C
ATOM   1806  O    SER A 239     23.135  43.587  29.483  1.00 27.39        O
ATOM   1807  CB   SER A 239     21.741  46.487  28.650  1.00 24.38        C
ATOM   1808  OG   SER A 239     22.303  46.677  27.372  1.00 25.56        O
ATOM   1809  N    ASP A 240     22.795  43.922  27.283  1.00 26.46        N
ATOM   1810  CA   ASP A 240     23.906  43.075  26.859  1.00 25.45        C
ATOM   1811  C    ASP A 240     25.037  43.940  26.300  1.00 25.86        C
ATOM   1812  O    ASP A 240     25.954  43.441  25.647  1.00 27.03        O
ATOM   1813  CB   ASP A 240     23.423  42.099  25.787  1.00 26.76        C
ATOM   1814  CG   ASP A 240     23.024  42.799  24.498  1.00 29.30        C
ATOM   1815  OD1  ASP A 240     22.588  43.970  24.549  1.00 27.88        O
ATOM   1816  OD2  ASP A 240     23.136  42.168  23.428  1.00 32.35        O
ATOM   1817  N    VAL A 241     24.966  45.237  26.574  1.00 25.24        N
ATOM   1818  CA   VAL A 241     25.953  46.197  26.094  1.00 26.65        C
ATOM   1819  C    VAL A 241     27.386  45.920  26.537  1.00 27.56        C
ATOM   1820  O    VAL A 241     28.328  46.185  25.789  1.00 28.41        O
ATOM   1821  CB   VAL A 241     25.581  47.626  26.539  1.00 28.46        C
ATOM   1822  CG1  VAL A 241     25.647  47.732  28.062  1.00 26.65        C
ATOM   1823  CG2  VAL A 241     26.510  48.637  25.881  1.00 30.04        C
ATOM   1824  N    ASP A 242     27.557  45.391  27.745  1.00 27.11        N
ATOM   1825  CA   ASP A 242     28.895  45.111  28.251  1.00 27.19        C
ATOM   1826  C    ASP A 242     29.414  43.764  27.775  1.00 28.44        C
ATOM   1827  O    ASP A 242     28.814  42.722  28.041  1.00 27.46        O
ATOM   1828  CB   ASP A 242     28.914  45.149  29.779  1.00 27.05        C
ATOM   1829  CG   ASP A 242     30.310  45.335  30.332  1.00 27.10        C
ATOM   1830  OD1  ASP A 242     31.210  44.549  29.965  1.00 30.77        O
ATOM   1831  OD2  ASP A 242     30.511  46.269  31.133  1.00 25.36        O
ATOM   1832  N    GLU A 243     30.548  43.797  27.083  1.00 29.09        N
ATOM   1833  CA   GLU A 243     31.170  42.594  26.544  1.00 30.76        C
ATOM   1834  C    GLU A 243     31.471  41.540  27.600  1.00 28.79        C
ATOM   1835  O    GLU A 243     31.487  40.348  27.300  1.00 27.45        O
ATOM   1836  CB   GLU A 243     32.455  42.964  25.792  1.00 35.84        C
ATOM   1837  CG   GLU A 243     32.209  43.768  24.508  1.00 42.52        C
ATOM   1838  CD   GLU A 243     33.497  44.161  23.788  1.00 46.97        C
ATOM   1839  OE1  GLU A 243     34.311  43.259  23.486  1.00 48.21        O
ATOM   1840  OE2  GLU A 243     33.691  45.371  23.518  1.00 48.40        O
ATOM   1841  N    ARG A 244     31.707  41.977  28.832  1.00 27.06        N
ATOM   1842  CA   ARG A 244     32.008  41.051  29.917  1.00 26.90        C
ATOM   1843  C    ARG A 244     30.781  40.252  30.352  1.00 26.04        C
ATOM   1844  O    ARG A 244     30.909  39.175  30.934  1.00 27.39        O
ATOM   1845  CB   ARG A 244     32.581  41.814  31.118  1.00 28.64        C
ATOM   1846  CG   ARG A 244     34.029  42.270  30.944  1.00 28.08        C
ATOM   1847  CD   ARG A 244     34.420  43.290  32.006  1.00 27.64        C
ATOM   1848  NE   ARG A 244     33.593  44.488  31.896  1.00 29.06        N
ATOM   1849  CZ   ARG A 244     33.883  45.659  32.452  1.00 28.26        C
ATOM   1850  NH1  ARG A 244     34.988  45.805  33.174  1.00 26.29        N
ATOM   1851  NH2  ARG A 244     33.072  46.693  32.265  1.00 26.54        N
ATOM   1852  N    ASP A 245     29.594  40.779  30.065  1.00 24.78        N
ATOM   1853  CA   ASP A 245     28.350  40.111  30.438  1.00 22.84        C
ATOM   1854  C    ASP A 245     27.816  39.235  29.312  1.00 22.66        C
ATOM   1855  O    ASP A 245     27.121  38.257  29.554  1.00 22.50        O
ATOM   1856  CB   ASP A 245     27.289  41.147  30.818  1.00 22.32        C
ATOM   1857  CG   ASP A 245     27.731  42.047  31.957  1.00 22.73        C
ATOM   1858  OD1  ASP A 245     28.351  41.524  32.907  1.00 21.63        O
ATOM   1859  OD2  ASP A 245     27.453  43.268  31.909  1.00 21.49        O
ATOM   1860  N    GLN A 246     28.150  39.587  28.078  1.00 23.81        N
ATOM   1861  CA   GLN A 246     27.682  38.837  26.920  1.00 26.64        C
ATOM   1862  C    GLN A 246     27.873  37.318  26.961  1.00 25.96        C
ATOM   1863  O    GLN A 246     27.017  36.573  26.498  1.00 27.12        O
ATOM   1864  CB   GLN A 246     28.308  39.418  25.652  1.00 26.72        C
ATOM   1865  CG   GLN A 246     27.705  40.761  25.270  1.00 28.54        C
ATOM   1866  CD   GLN A 246     28.499  41.479  24.199  1.00 30.03        C
ATOM   1867  OE1  GLN A 246     29.322  40.875  23.510  1.00 31.86        O
ATOM   1868  NE2  GLN A 246     28.248  42.776  24.045  1.00 28.71        N
ATOM   1869  N    PRO A 247     28.983  36.834  27.529  1.00 27.26        N
ATOM   1870  CA   PRO A 247     29.170  35.379  27.568  1.00 27.77        C
ATOM   1871  C    PRO A 247     28.035  34.617  28.252  1.00 28.86        C
ATOM   1872  O    PRO A 247     27.824  33.430  27.985  1.00 29.52        O
ATOM   1873  CB   PRO A 247     30.492  35.224  28.319  1.00 28.55        C
ATOM   1874  CG   PRO A 247     31.234  36.469  27.941  1.00 26.53        C
ATOM   1875  CD   PRO A 247     30.164  37.525  28.074  1.00 26.14        C
ATOM   1876  N    PHE A 248     27.300  35.301  29.123  1.00 28.01        N
ATOM   1877  CA   PHE A 248     26.208  34.680  29.868  1.00 27.45        C
ATOM   1878  C    PHE A 248     24.814  34.941  29.296  1.00 28.13        C
ATOM   1879  O    PHE A 248     23.838  34.311  29.716  1.00 28.65        O
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ATOM   1880  CB  PHE A 248    26.267  35.163  31.315  1.00 27.52           C
ATOM   1881  CG  PHE A 248    27.622  35.021  31.937  1.00 26.08           C
ATOM   1882  CD1 PHE A 248    28.076  33.781  32.367  1.00 26.21           C
ATOM   1883  CD2 PHE A 248    28.461  36.122  32.062  1.00 24.98           C
ATOM   1884  CE1 PHE A 248    29.350  33.634  32.914  1.00 26.32           C
ATOM   1885  CE2 PHE A 248    29.739  35.987  32.606  1.00 25.02           C
ATOM   1886  CZ  PHE A 248    30.184  34.739  33.033  1.00 24.95           C
ATOM   1887  N   ILE A 249    24.721  35.863  28.344  1.00 29.21           N
ATOM   1888  CA  ILE A 249    23.444  36.213  27.728  1.00 30.19           C
ATOM   1889  C   ILE A 249    22.942  35.086  26.827  1.00 32.17           C
ATOM   1890  O   ILE A 249    23.646  34.644  25.920  1.00 32.64           O
ATOM   1891  CB  ILE A 249    23.571  37.513  26.893  1.00 30.87           C
ATOM   1892  CG1 ILE A 249    24.181  38.631  27.749  1.00 32.45           C
ATOM   1893  CG2 ILE A 249    22.208  37.934  26.366  1.00 30.45           C
ATOM   1894  CD1 ILE A 249    23.405  38.959  28.997  1.00 31.88           C
ATOM   1895  N   THR A 250    21.721  34.623  27.077  1.00 33.14           N
ATOM   1896  CA  THR A 250    21.145  33.543  26.282  1.00 35.28           C
ATOM   1897  C   THR A 250    20.552  34.011  24.959  1.00 36.69           C
ATOM   1898  O   THR A 250    20.511  33.251  23.998  1.00 38.72           O
ATOM   1899  CB  THR A 250    20.035  32.799  27.050  1.00 35.30           C
ATOM   1900  OG1 THR A 250    18.874  33.633  27.157  1.00 34.35           O
ATOM   1901  CG2 THR A 250    20.517  32.431  28.440  1.00 36.55           C
ATOM   1902  N   GLY A 251    20.091  35.256  24.910  1.00 37.66           N
ATOM   1903  CA  GLY A 251    19.494  35.772  23.691  1.00 38.08           C
ATOM   1904  C   GLY A 251    18.001  36.012  23.856  1.00 39.01           C
ATOM   1905  O   GLY A 251    17.404  36.807  23.128  1.00 39.44           O
ATOM   1906  N   GLU A 252    17.396  35.323  24.819  1.00 39.14           N
ATOM   1907  CA  GLU A 252    15.968  35.466  25.094  1.00 39.90           C
ATOM   1908  C   GLU A 252    15.684  36.774  25.824  1.00 39.70           C
ATOM   1909  O   GLU A 252    16.487  37.230  26.641  1.00 39.05           O
ATOM   1910  CB  GLU A 252    15.488  34.322  25.970  1.00 41.01           C
ATOM   1911  CG  GLU A 252    16.103  32.993  25.638  1.00 44.68           C
ATOM   1912  CD  GLU A 252    15.940  32.014  26.776  1.00 47.62           C
ATOM   1913  OE1 GLU A 252    14.784  31.653  27.081  1.00 50.26           O
ATOM   1914  OE2 GLU A 252    16.965  31.618  27.377  1.00 47.88           O
ATOM   1915  N   ARG A 253    14.525  37.356  25.537  1.00 39.41           N
ATOM   1916  CA  ARG A 253    14.109  38.613  26.146  1.00 38.69           C
ATOM   1917  C   ARG A 253    12.718  38.440  26.757  1.00 38.09           C
ATOM   1918  O   ARG A 253    11.929  37.629  26.280  1.00 38.62           O
ATOM   1919  CB  ARG A 253    14.069  39.711  25.078  1.00 40.50           C
ATOM   1920  CG  ARG A 253    15.408  40.019  24.424  1.00 41.68           C
ATOM   1921  CD  ARG A 253    16.176  41.073  25.197  1.00 43.73           C
ATOM   1922  NE  ARG A 253    15.703  42.431  24.926  1.00 45.35           N
ATOM   1923  CZ  ARG A 253    15.842  43.052  23.758  1.00 47.08           C
ATOM   1924  NH1 ARG A 253    16.440  42.436  22.744  1.00 48.05           N
ATOM   1925  NH2 ARG A 253    15.394  44.291  23.604  1.00 47.89           N
ATOM   1926  N   THR A 254    12.426  39.192  27.817  1.00 36.71           N
ATOM   1927  CA  THR A 254    11.115  39.129  28.465  1.00 34.94           C
ATOM   1928  C   THR A 254    10.227  40.209  27.844  1.00 35.23           C
ATOM   1929  O   THR A 254    10.684  40.990  27.010  1.00 33.47           O
ATOM   1930  CB  THR A 254    11.211  39.402  29.985  1.00 33.94           C
ATOM   1931  OG1 THR A 254    11.697  40.732  30.205  1.00 30.98           O
ATOM   1932  CG2 THR A 254    12.152  38.406  30.652  1.00 32.78           C
ATOM   1933  N   ARG A 255     8.965  40.262  28.253  1.00 35.81           N
ATOM   1934  CA  ARG A 255     8.054  41.264  27.713  1.00 36.82           C
ATOM   1935  C   ARG A 255     8.486  42.680  28.096  1.00 35.44           C
ATOM   1936  O   ARG A 255     8.149  43.641  27.403  1.00 35.64           O
ATOM   1937  CB  ARG A 255     6.629  41.008  28.205  1.00 39.42           C
ATOM   1938  CG  ARG A 255     6.072  39.657  27.795  1.00 44.31           C
ATOM   1939  CD  ARG A 255     4.641  39.479  28.279  1.00 50.35           C
ATOM   1940  NE  ARG A 255     3.739  40.476  27.705  1.00 55.10           N
ATOM   1941  CZ  ARG A 255     3.485  40.599  26.404  1.00 58.25           C
ATOM   1942  NH1 ARG A 255     4.064  39.784  25.527  1.00 59.22           N
ATOM   1943  NH2 ARG A 255     2.651  41.541  25.977  1.00 59.81           N
ATOM   1944  N   GLU A 256     9.229  42.807  29.194  1.00 33.44           N
ATOM   1945  CA  GLU A 256     9.702  44.117  29.640  1.00 32.07           C
ATOM   1946  C   GLU A 256    10.947  44.525  28.873  1.00 30.94           C
ATOM   1947  O   GLU A 256    11.331  45.693  28.878  1.00 30.92           O
ATOM   1948  CB  GLU A 256    10.017  44.108  31.142  1.00 30.49           C
ATOM   1949  CG  GLU A 256     8.833  43.739  32.013  1.00 29.82           C
ATOM   1950  CD  GLU A 256     8.853  42.290  32.452  1.00 27.99           C
ATOM   1951  OE1 GLU A 256     9.336  41.436  31.681  1.00 27.74           O
ATOM   1952  OE2 GLU A 256     8.372  42.008  33.570  1.00 25.56           O
ATOM   1953  N   GLY A 257    11.574  43.556  28.213  1.00 29.87           N
ATOM   1954  CA  GLY A 257    12.775  43.851  27.455  1.00 29.47           C
ATOM   1955  C   GLY A 257    14.065  43.427  28.137  1.00 29.34           C
ATOM   1956  O   GLY A 257    15.158  43.735  27.654  1.00 29.75           O
ATOM   1957  N   PHE A 258    13.953  42.728  29.264  1.00 27.88           N
ATOM   1958  CA  PHE A 258    15.140  42.272  29.968  1.00 27.45           C
ATOM   1959  C   PHE A 258    15.751  41.099  29.208  1.00 28.91           C
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| ATOM | 1960 | O | PHE A 258 | 15.064 | 40.401 | 28.457 | 1.00 | 30.83 | O |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 1961 | CB | PHE A 258 | 14.800 | 41.824 | 31.393 | 1.00 | 24.38 | C |
| ATOM | 1962 | CG | PHE A 258 | 14.171 | 42.896 | 32.238 | 1.00 | 25.43 | C |
| ATOM | 1963 | CD1 | PHE A 258 | 14.754 | 44.157 | 32.342 | 1.00 | 25.81 | C |
| ATOM | 1964 | CD2 | PHE A 258 | 12.993 | 42.643 | 32.940 | 1.00 | 24.55 | C |
| ATOM | 1965 | CE1 | PHE A 258 | 14.175 | 45.152 | 33.130 | 1.00 | 24.50 | C |
| ATOM | 1966 | CE2 | PHE A 258 | 12.407 | 43.629 | 33.731 | 1.00 | 23.55 | C |
| ATOM | 1967 | CZ | PHE A 258 | 13.001 | 44.887 | 33.825 | 1.00 | 24.46 | C |
| ATOM | 1968 | N | TYR A 259 | 17.047 | 40.887 | 29.406 | 1.00 | 29.16 | N |
| ATOM | 1969 | CA | TYR A 259 | 17.750 | 39.789 | 28.757 | 1.00 | 28.04 | C |
| ATOM | 1970 | C | TYR A 259 | 17.965 | 38.649 | 29.744 | 1.00 | 27.75 | C |
| ATOM | 1971 | O | TYR A 259 | 18.387 | 38.874 | 30.879 | 1.00 | 26.14 | O |
| ATOM | 1972 | CB | TYR A 259 | 19.120 | 40.244 | 28.247 | 1.00 | 26.94 | C |
| ATOM | 1973 | CG | TYR A 259 | 19.090 | 41.264 | 27.136 | 1.00 | 26.58 | C |
| ATOM | 1974 | CD1 | TYR A 259 | 18.737 | 42.592 | 27.383 | 1.00 | 24.86 | C |
| ATOM | 1975 | CD2 | TYR A 259 | 19.453 | 40.908 | 25.836 | 1.00 | 26.34 | C |
| ATOM | 1976 | CE1 | TYR A 259 | 18.754 | 43.542 | 26.358 | 1.00 | 26.18 | C |
| ATOM | 1977 | CE2 | TYR A 259 | 19.471 | 41.850 | 24.805 | 1.00 | 25.05 | C |
| ATOM | 1978 | CZ | TYR A 259 | 19.126 | 43.161 | 25.071 | 1.00 | 24.86 | C |
| ATOM | 1979 | OH | TYR A 259 | 19.183 | 44.091 | 24.056 | 1.00 | 25.85 | O |
| ATOM | 1980 | N | ARG A 260 | 17.675 | 37.427 | 29.309 | 1.00 | 28.63 | N |
| ATOM | 1981 | CA | ARG A 260 | 17.884 | 36.257 | 30.153 | 1.00 | 28.96 | C |
| ATOM | 1982 | C | ARG A 260 | 19.387 | 36.047 | 30.203 | 1.00 | 28.14 | C |
| ATOM | 1983 | O | ARG A 260 | 20.073 | 36.203 | 29.195 | 1.00 | 26.53 | O |
| ATOM | 1984 | CB | ARG A 260 | 17.218 | 35.022 | 29.547 | 1.00 | 30.78 | C |
| ATOM | 1985 | CG | ARG A 260 | 15.711 | 35.011 | 29.646 | 1.00 | 35.75 | C |
| ATOM | 1986 | CD | ARG A 260 | 15.264 | 34.845 | 31.088 | 1.00 | 41.55 | C |
| ATOM | 1987 | NE | ARG A 260 | 13.807 | 34.824 | 31.215 | 1.00 | 45.12 | N |
| ATOM | 1988 | CZ | ARG A 260 | 13.162 | 34.802 | 32.377 | 1.00 | 46.71 | C |
| ATOM | 1989 | NH1 | ARG A 260 | 13.850 | 34.797 | 33.516 | 1.00 | 48.13 | N |
| ATOM | 1990 | NH2 | ARG A 260 | 11.832 | 34.788 | 32.403 | 1.00 | 48.33 | N |
| ATOM | 1991 | N | THR A 261 | 19.902 | 35.698 | 31.374 | 1.00 | 28.72 | N |
| ATOM | 1992 | CA | THR A 261 | 21.337 | 35.491 | 31.524 | 1.00 | 28.77 | C |
| ATOM | 1993 | C | THR A 261 | 21.578 | 34.247 | 32.374 | 1.00 | 28.87 | C |
| ATOM | 1994 | O | THR A 261 | 20.749 | 33.892 | 33.215 | 1.00 | 26.76 | O |
| ATOM | 1995 | CB | THR A 261 | 21.995 | 36.742 | 32.178 | 1.00 | 27.85 | C |
| ATOM | 1996 | OG1 | THR A 261 | 23.421 | 36.590 | 32.197 | 1.00 | 26.93 | O |
| ATOM | 1997 | CG2 | THR A 261 | 21.476 | 36.934 | 33.605 | 1.00 | 25.76 | C |
| ATOM | 1998 | N | LYS A 262 | 22.703 | 33.576 | 32.145 | 1.00 | 30.47 | N |
| ATOM | 1999 | CA | LYS A 262 | 23.024 | 32.363 | 32.898 | 1.00 | 31.94 | C |
| ATOM | 2000 | C | LYS A 262 | 23.642 | 32.694 | 34.251 | 1.00 | 31.21 | C |
| ATOM | 2001 | O | LYS A 262 | 24.757 | 33.215 | 34.333 | 1.00 | 30.11 | O |
| ATOM | 2002 | CB | LYS A 262 | 23.965 | 31.472 | 32.087 | 1.00 | 34.12 | C |
| ATOM | 2003 | CG | LYS A 262 | 23.360 | 31.016 | 30.772 | 1.00 | 39.91 | C |
| ATOM | 2004 | CD | LYS A 262 | 24.294 | 30.104 | 29.996 | 1.00 | 43.69 | C |
| ATOM | 2005 | CE | LYS A 262 | 23.660 | 29.680 | 28.676 | 1.00 | 46.45 | C |
| ATOM | 2006 | NZ | LYS A 262 | 22.327 | 29.039 | 28.889 | 1.00 | 48.69 | N |
| ATOM | 2007 | N | ASN A 263 | 22.909 | 32.382 | 35.313 | 1.00 | 29.48 | N |
| ATOM | 2008 | CA | ASN A 263 | 23.367 | 32.664 | 36.665 | 1.00 | 30.96 | C |
| ATOM | 2009 | C | ASN A 263 | 24.353 | 31.614 | 37.145 | 1.00 | 31.10 | C |
| ATOM | 2010 | O | ASN A 263 | 24.574 | 30.603 | 36.481 | 1.00 | 31.66 | O |
| ATOM | 2011 | CB | ASN A 263 | 22.181 | 32.685 | 37.615 | 1.00 | 30.67 | C |
| ATOM | 2012 | CG | ASN A 263 | 21.464 | 31.364 | 37.648 | 1.00 | 32.47 | C |
| ATOM | 2013 | OD1 | ASN A 263 | 20.885 | 30.938 | 36.649 | 1.00 | 34.76 | O |
| ATOM | 2014 | ND2 | ASN A 263 | 21.511 | 30.691 | 38.790 | 1.00 | 30.33 | N |
| ATOM | 2015 | N | GLY A 264 | 24.933 | 31.855 | 38.312 | 1.00 | 30.48 | N |
| ATOM | 2016 | CA | GLY A 264 | 25.876 | 30.906 | 38.868 | 1.00 | 31.46 | C |
| ATOM | 2017 | C | GLY A 264 | 27.090 | 31.574 | 39.466 | 1.00 | 31.66 | C |
| ATOM | 2018 | O | GLY A 264 | 27.188 | 32.801 | 39.491 | 1.00 | 31.88 | O |
| ATOM | 2019 | N | ILE A 265 | 28.021 | 30.767 | 39.955 | 1.00 | 32.46 | N |
| ATOM | 2020 | CA | ILE A 265 | 29.228 | 31.306 | 40.552 | 1.00 | 33.11 | C |
| ATOM | 2021 | C | ILE A 265 | 30.131 | 31.883 | 39.477 | 1.00 | 32.89 | C |
| ATOM | 2022 | O | ILE A 265 | 30.904 | 32.807 | 39.734 | 1.00 | 34.12 | O |
| ATOM | 2023 | CB | ILE A 265 | 30.004 | 30.227 | 41.321 | 1.00 | 34.25 | C |
| ATOM | 2024 | CG1 | ILE A 265 | 31.253 | 30.846 | 41.956 | 1.00 | 34.21 | C |
| ATOM | 2025 | CG2 | ILE A 265 | 30.382 | 29.089 | 40.379 | 1.00 | 35.35 | C |
| ATOM | 2026 | CD1 | ILE A 265 | 31.988 | 29.920 | 42.888 | 1.00 | 36.55 | C |
| ATOM | 2027 | N | GLU A 266 | 30.020 | 31.348 | 38.267 | 1.00 | 32.40 | N |
| ATOM | 2028 | CA | GLU A 266 | 30.851 | 31.814 | 37.170 | 1.00 | 33.66 | C |
| ATOM | 2029 | C | GLU A 266 | 30.660 | 33.310 | 36.899 | 1.00 | 31.07 | C |
| ATOM | 2030 | O | GLU A 266 | 31.637 | 34.048 | 36.790 | 1.00 | 30.95 | O |
| ATOM | 2031 | CB | GLU A 266 | 30.585 | 30.974 | 35.908 | 1.00 | 35.29 | C |
| ATOM | 2032 | CG | GLU A 266 | 31.440 | 31.360 | 34.707 | 1.00 | 42.30 | C |
| ATOM | 2033 | CD | GLU A 266 | 31.470 | 30.285 | 33.618 | 1.00 | 47.38 | C |
| ATOM | 2034 | OE1 | GLU A 266 | 30.427 | 29.634 | 33.384 | 1.00 | 49.96 | O |
| ATOM | 2035 | OE2 | GLU A 266 | 32.534 | 30.102 | 32.983 | 1.00 | 48.84 | O |
| ATOM | 2036 | N | PRO A 267 | 29.404 | 33.781 | 36.792 | 1.00 | 29.94 | N |
| ATOM | 2037 | CA | PRO A 267 | 29.206 | 35.214 | 36.540 | 1.00 | 28.82 | C |
| ATOM | 2038 | C | PRO A 267 | 29.674 | 36.038 | 37.741 | 1.00 | 28.15 | C |
| ATOM | 2039 | O | PRO A 267 | 30.161 | 37.158 | 37.588 | 1.00 | 28.16 | O |

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ATOM   2040  CB  PRO A 267     27.695  35.326  36.320  1.00 28.15           C
ATOM   2041  CG  PRO A 267     27.324  33.984  35.807  1.00 29.54           C
ATOM   2042  CD  PRO A 267     28.129  33.055  36.678  1.00 28.85           C
ATOM   2043  N   CYS A 268     29.526  35.477  38.938  1.00 25.36           N
ATOM   2044  CA  CYS A 268     29.946  36.178  40.144  1.00 25.16           C
ATOM   2045  C   CYS A 268     31.454  36.376  40.164  1.00 25.17           C
ATOM   2046  O   CYS A 268     31.948  37.435  40.557  1.00 25.10           O
ATOM   2047  CB  CYS A 268     29.509  35.407  41.390  1.00 24.45           C
ATOM   2048  SG  CYS A 268     27.728  35.401  41.648  1.00 25.79           S
ATOM   2049  N   ILE A 269     32.189  35.357  39.735  1.00 23.67           N
ATOM   2050  CA  ILE A 269     33.640  35.446  39.712  1.00 24.63           C
ATOM   2051  C   ILE A 269     34.102  36.515  38.731  1.00 26.03           C
ATOM   2052  O   ILE A 269     34.947  37.349  39.061  1.00 26.89           O
ATOM   2053  CB  ILE A 269     34.263  34.094  39.329  1.00 26.11           C
ATOM   2054  CG1 ILE A 269     34.016  33.087  40.455  1.00 24.19           C
ATOM   2055  CG2 ILE A 269     35.757  34.261  39.054  1.00 26.28           C
ATOM   2056  CD1 ILE A 269     34.392  31.683  40.102  1.00 26.98           C
ATOM   2057  N   ALA A 270     33.535  36.495  37.527  1.00 26.52           N
ATOM   2058  CA  ALA A 270     33.891  37.465  36.500  1.00 27.06           C
ATOM   2059  C   ALA A 270     33.626  38.896  36.971  1.00 26.76           C
ATOM   2060  O   ALA A 270     34.482  39.771  36.838  1.00 29.28           O
ATOM   2061  CB  ALA A 270     33.112  37.176  35.213  1.00 26.22           C
ATOM   2062  N   ARG A 271     32.441  39.136  37.519  1.00 25.91           N
ATOM   2063  CA  ARG A 271     32.093  40.466  38.006  1.00 24.85           C
ATOM   2064  C   ARG A 271     32.968  40.869  39.196  1.00 24.16           C
ATOM   2065  O   ARG A 271     33.423  42.010  39.277  1.00 23.12           O
ATOM   2066  CB  ARG A 271     30.611  40.512  38.391  1.00 24.88           C
ATOM   2067  CG  ARG A 271     29.679  40.557  37.181  1.00 23.88           C
ATOM   2068  CD  ARG A 271     28.230  40.345  37.580  1.00 23.63           C
ATOM   2069  NE  ARG A 271     27.329  40.545  36.450  1.00 23.98           N
ATOM   2070  CZ  ARG A 271     26.695  41.682  36.190  1.00 25.20           C
ATOM   2071  NH1 ARG A 271     26.852  42.733  36.986  1.00 28.70           N
ATOM   2072  NH2 ARG A 271     25.919  41.776  35.122  1.00 24.11           N
ATOM   2073  N   ALA A 272     33.205  39.933  40.113  1.00 23.41           N
ATOM   2074  CA  ALA A 272     34.042  40.209  41.280  1.00 25.95           C
ATOM   2075  C   ALA A 272     35.395  40.756  40.827  1.00 26.07           C
ATOM   2076  O   ALA A 272     35.844  41.803  41.302  1.00 28.06           O
ATOM   2077  CB  ALA A 272     34.236  38.939  42.108  1.00 25.90           C
ATOM   2078  N   LYS A 273     36.031  40.058  39.891  1.00 25.42           N
ATOM   2079  CA  LYS A 273     37.323  40.490  39.365  1.00 25.70           C
ATOM   2080  C   LYS A 273     37.233  41.882  38.749  1.00 25.32           C
ATOM   2081  O   LYS A 273     38.157  42.680  38.876  1.00 27.02           O
ATOM   2082  CB  LYS A 273     37.820  39.505  38.302  1.00 25.99           C
ATOM   2083  CG  LYS A 273     38.093  38.117  38.824  1.00 24.85           C
ATOM   2084  CD  LYS A 273     38.449  37.170  37.696  1.00 27.01           C
ATOM   2085  CE  LYS A 273     38.740  35.781  38.233  1.00 29.22           C
ATOM   2086  NZ  LYS A 273     39.084  34.834  37.129  1.00 33.78           N
ATOM   2087  N   ALA A 274     36.120  42.166  38.077  1.00 24.23           N
ATOM   2088  CA  ALA A 274     35.926  43.464  37.442  1.00 23.96           C
ATOM   2089  C   ALA A 274     35.733  44.566  38.476  1.00 24.71           C
ATOM   2090  O   ALA A 274     36.130  45.707  38.250  1.00 23.36           O
ATOM   2091  CB  ALA A 274     34.723  43.423  36.501  1.00 22.70           C
ATOM   2092  N   TYR A 275     35.124  44.221  39.609  1.00 24.62           N
ATOM   2093  CA  TYR A 275     34.873  45.192  40.670  1.00 24.47           C
ATOM   2094  C   TYR A 275     36.077  45.397  41.588  1.00 24.77           C
ATOM   2095  O   TYR A 275     36.284  46.493  42.112  1.00 23.96           O
ATOM   2096  CB  TYR A 275     33.684  44.754  41.538  1.00 22.89           C
ATOM   2097  CG  TYR A 275     32.374  44.510  40.813  1.00 20.43           C
ATOM   2098  CD1 TYR A 275     32.036  45.216  39.656  1.00 19.48           C
ATOM   2099  CD2 TYR A 275     31.442  43.610  41.325  1.00 20.55           C
ATOM   2100  CE1 TYR A 275     30.803  45.027  39.036  1.00 18.07           C
ATOM   2101  CE2 TYR A 275     30.207  43.418  40.713  1.00 19.65           C
ATOM   2102  CZ  TYR A 275     29.897  44.126  39.574  1.00 18.68           C
ATOM   2103  OH  TYR A 275     28.679  43.919  38.973  1.00 20.53           O
ATOM   2104  N   ALA A 276     36.861  44.338  41.783  1.00 25.56           N
ATOM   2105  CA  ALA A 276     38.029  44.375  42.668  1.00 24.79           C
ATOM   2106  C   ALA A 276     38.746  45.720  42.786  1.00 24.69           C
ATOM   2107  O   ALA A 276     38.879  46.258  43.880  1.00 23.97           O
ATOM   2108  CB  ALA A 276     39.021  43.292  42.260  1.00 26.69           C
ATOM   2109  N   PRO A 277     39.205  46.290  41.662  1.00 24.59           N
ATOM   2110  CA  PRO A 277     39.910  47.577  41.701  1.00 25.73           C
ATOM   2111  C   PRO A 277     39.116  48.730  42.315  1.00 26.26           C
ATOM   2112  O   PRO A 277     39.682  49.782  42.628  1.00 26.03           O
ATOM   2113  CB  PRO A 277     40.233  47.848  40.228  1.00 24.35           C
ATOM   2114  CG  PRO A 277     40.271  46.477  39.617  1.00 26.08           C
ATOM   2115  CD  PRO A 277     39.081  45.813  40.275  1.00 26.74           C
ATOM   2116  N   PHE A 278     37.811  48.535  42.482  1.00 26.01           N
ATOM   2117  CA  PHE A 278     36.952  49.581  43.025  1.00 26.18           C
ATOM   2118  C   PHE A 278     36.256  49.161  44.317  1.00 26.60           C
ATOM   2119  O   PHE A 278     35.347  49.847  44.791  1.00 26.46           O
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| ATOM | 2120 | CB | PHE | A | 278 | 35.897 | 49.954 | 41.989 | 1.00 | 26.85 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2121 | CG | PHE | A | 278 | 36.463 | 50.302 | 40.643 | 1.00 | 27.43 | C |
| ATOM | 2122 | CD1 | PHE | A | 278 | 36.943 | 51.581 | 40.383 | 1.00 | 27.25 | C |
| ATOM | 2123 | CD2 | PHE | A | 278 | 36.524 | 49.346 | 39.635 | 1.00 | 27.50 | C |
| ATOM | 2124 | CE1 | PHE | A | 278 | 37.474 | 51.905 | 39.136 | 1.00 | 27.48 | C |
| ATOM | 2125 | CE2 | PHE | A | 278 | 37.055 | 49.658 | 38.388 | 1.00 | 28.02 | C |
| ATOM | 2126 | CZ | PHE | A | 278 | 37.530 | 50.942 | 38.139 | 1.00 | 26.61 | C |
| ATOM | 2127 | N | ALA | A | 279 | 36.687 | 48.044 | 44.893 | 1.00 | 25.59 | N |
| ATOM | 2128 | CA | ALA | A | 279 | 36.063 | 47.550 | 46.108 | 1.00 | 26.12 | C |
| ATOM | 2129 | C | ALA | A | 279 | 37.043 | 47.179 | 47.212 | 1.00 | 25.83 | C |
| ATOM | 2130 | O | ALA | A | 279 | 38.025 | 46.484 | 46.974 | 1.00 | 26.83 | O |
| ATOM | 2131 | CB | ALA | A | 279 | 35.200 | 46.347 | 45.773 | 1.00 | 26.26 | C |
| ATOM | 2132 | N | ASP | A | 280 | 36.762 | 47.635 | 48.427 | 1.00 | 24.31 | N |
| ATOM | 2133 | CA | ASP | A | 280 | 37.616 | 47.309 | 49.558 | 1.00 | 23.23 | C |
| ATOM | 2134 | C | ASP | A | 280 | 37.299 | 45.891 | 50.013 | 1.00 | 22.17 | C |
| ATOM | 2135 | O | ASP | A | 280 | 38.136 | 45.208 | 50.600 | 1.00 | 21.92 | O |
| ATOM | 2136 | CB | ASP | A | 280 | 37.396 | 48.309 | 50.689 | 1.00 | 22.79 | C |
| ATOM | 2137 | CG | ASP | A | 280 | 37.844 | 49.698 | 50.313 | 1.00 | 22.29 | C |
| ATOM | 2138 | OD1 | ASP | A | 280 | 38.949 | 49.820 | 49.751 | 1.00 | 24.05 | O |
| ATOM | 2139 | OD2 | ASP | A | 280 | 37.104 | 50.666 | 50.577 | 1.00 | 23.84 | O |
| ATOM | 2140 | N | LEU | A | 281 | 36.076 | 45.456 | 49.723 | 1.00 | 22.87 | N |
| ATOM | 2141 | CA | LEU | A | 281 | 35.613 | 44.113 | 50.046 | 1.00 | 22.52 | C |
| ATOM | 2142 | C | LEU | A | 281 | 34.616 | 43.698 | 48.980 | 1.00 | 23.85 | C |
| ATOM | 2143 | O | LEU | A | 281 | 33.872 | 44.528 | 48.447 | 1.00 | 24.19 | O |
| ATOM | 2144 | CB | LEU | A | 281 | 34.929 | 44.073 | 51.409 | 1.00 | 23.16 | C |
| ATOM | 2145 | CG | LEU | A | 281 | 35.788 | 44.312 | 52.651 | 1.00 | 25.29 | C |
| ATOM | 2146 | CD1 | LEU | A | 281 | 35.212 | 45.473 | 53.440 | 1.00 | 24.64 | C |
| ATOM | 2147 | CD2 | LEU | A | 281 | 35.819 | 43.049 | 53.506 | 1.00 | 26.47 | C |
| ATOM | 2148 | N | ILE | A | 282 | 34.596 | 42.412 | 48.664 | 1.00 | 22.48 | N |
| ATOM | 2149 | CA | ILE | A | 282 | 33.672 | 41.923 | 47.665 | 1.00 | 23.43 | C |
| ATOM | 2150 | C | ILE | A | 282 | 32.774 | 40.867 | 48.298 | 1.00 | 24.50 | C |
| ATOM | 2151 | O | ILE | A | 282 | 33.231 | 40.004 | 49.058 | 1.00 | 24.47 | O |
| ATOM | 2152 | CB | ILE | A | 282 | 34.417 | 41.344 | 46.452 | 1.00 | 24.47 | C |
| ATOM | 2153 | CG1 | ILE | A | 282 | 35.364 | 42.407 | 45.882 | 1.00 | 25.26 | C |
| ATOM | 2154 | CG2 | ILE | A | 282 | 33.419 | 40.918 | 45.388 | 1.00 | 23.02 | C |
| ATOM | 2155 | CD1 | ILE | A | 282 | 36.164 | 41.943 | 44.679 | 1.00 | 27.05 | C |
| ATOM | 2156 | N | TRP | A | 283 | 31.488 | 40.954 | 47.984 | 1.00 | 23.31 | N |
| ATOM | 2157 | CA | TRP | A | 283 | 30.507 | 40.043 | 48.539 | 1.00 | 22.65 | C |
| ATOM | 2158 | C | TRP | A | 283 | 29.602 | 39.436 | 47.475 | 1.00 | 23.01 | C |
| ATOM | 2159 | O | TRP | A | 283 | 29.011 | 40.137 | 46.648 | 1.00 | 23.49 | O |
| ATOM | 2160 | CB | TRP | A | 283 | 29.715 | 40.803 | 49.607 | 1.00 | 22.28 | C |
| ATOM | 2161 | CG | TRP | A | 283 | 28.348 | 40.289 | 49.966 | 1.00 | 22.29 | C |
| ATOM | 2162 | CD1 | TRP | A | 283 | 27.885 | 39.004 | 49.877 | 1.00 | 19.89 | C |
| ATOM | 2163 | CD2 | TRP | A | 283 | 27.290 | 41.057 | 50.547 | 1.00 | 19.79 | C |
| ATOM | 2164 | NE1 | TRP | A | 283 | 26.607 | 38.929 | 50.367 | 1.00 | 18.42 | N |
| ATOM | 2165 | CE2 | TRP | A | 283 | 26.216 | 40.175 | 50.786 | 1.00 | 20.21 | C |
| ATOM | 2166 | CE3 | TRP | A | 283 | 27.149 | 42.409 | 50.894 | 1.00 | 20.82 | C |
| ATOM | 2167 | CZ2 | TRP | A | 283 | 25.010 | 40.600 | 51.357 | 1.00 | 19.68 | C |
| ATOM | 2168 | CZ3 | TRP | A | 283 | 25.950 | 42.833 | 51.463 | 1.00 | 21.34 | C |
| ATOM | 2169 | CH2 | TRP | A | 283 | 24.895 | 41.926 | 51.688 | 1.00 | 20.08 | C |
| ATOM | 2170 | N | MET | A | 284 | 29.513 | 38.113 | 47.506 | 1.00 | 22.31 | N |
| ATOM | 2171 | CA | MET | A | 284 | 28.688 | 37.369 | 46.574 | 1.00 | 23.05 | C |
| ATOM | 2172 | C | MET | A | 284 | 27.534 | 36.769 | 47.357 | 1.00 | 22.78 | C |
| ATOM | 2173 | O | MET | A | 284 | 27.749 | 36.106 | 48.367 | 1.00 | 22.97 | O |
| ATOM | 2174 | CB | MET | A | 284 | 29.514 | 36.250 | 45.934 | 1.00 | 25.57 | C |
| ATOM | 2175 | CG | MET | A | 284 | 28.703 | 35.212 | 45.176 | 1.00 | 29.17 | C |
| ATOM | 2176 | SD | MET | A | 284 | 29.671 | 33.712 | 44.825 | 1.00 | 29.51 | S |
| ATOM | 2177 | CE | MET | A | 284 | 28.398 | 32.597 | 44.391 | 1.00 | 29.41 | C |
| ATOM | 2178 | N | GLU | A | 285 | 26.310 | 37.028 | 46.915 | 1.00 | 22.95 | N |
| ATOM | 2179 | CA | GLU | A | 285 | 25.141 | 36.463 | 47.573 | 1.00 | 22.83 | C |
| ATOM | 2180 | C | GLU | A | 285 | 25.072 | 35.006 | 47.133 | 1.00 | 23.38 | C |
| ATOM | 2181 | O | GLU | A | 285 | 25.437 | 34.683 | 46.000 | 1.00 | 23.33 | O |
| ATOM | 2182 | CB | GLU | A | 285 | 23.870 | 37.192 | 47.135 | 1.00 | 22.48 | C |
| ATOM | 2183 | CG | GLU | A | 285 | 23.594 | 38.488 | 47.882 | 1.00 | 25.75 | C |
| ATOM | 2184 | CD | GLU | A | 285 | 23.168 | 38.252 | 49.325 | 1.00 | 27.47 | C |
| ATOM | 2185 | OE1 | GLU | A | 285 | 24.012 | 37.832 | 50.149 | 1.00 | 25.81 | O |
| ATOM | 2186 | OE2 | GLU | A | 285 | 21.976 | 38.482 | 49.630 | 1.00 | 28.39 | O |
| ATOM | 2187 | N | THR | A | 286 | 24.623 | 34.128 | 48.025 | 1.00 | 22.96 | N |
| ATOM | 2188 | CA | THR | A | 286 | 24.509 | 32.709 | 47.697 | 1.00 | 24.77 | C |
| ATOM | 2189 | C | THR | A | 286 | 23.137 | 32.181 | 48.118 | 1.00 | 24.84 | C |
| ATOM | 2190 | O | THR | A | 286 | 22.481 | 32.767 | 48.971 | 1.00 | 24.81 | O |
| ATOM | 2191 | CB | THR | A | 286 | 25.613 | 31.874 | 48.395 | 1.00 | 25.67 | C |
| ATOM | 2192 | OG1 | THR | A | 286 | 25.436 | 31.913 | 49.818 | 1.00 | 24.34 | O |
| ATOM | 2193 | CG2 | THR | A | 286 | 26.989 | 32.425 | 48.045 | 1.00 | 25.89 | C |
| ATOM | 2194 | N | GLY | A | 287 | 22.708 | 31.079 | 47.511 | 1.00 | 25.57 | N |
| ATOM | 2195 | CA | GLY | A | 287 | 21.417 | 30.505 | 47.850 | 1.00 | 26.50 | C |
| ATOM | 2196 | C | GLY | A | 287 | 21.452 | 29.574 | 49.051 | 1.00 | 27.05 | C |
| ATOM | 2197 | O | GLY | A | 287 | 20.404 | 29.181 | 49.565 | 1.00 | 28.25 | O |
| ATOM | 2198 | N | THR | A | 288 | 22.649 | 29.209 | 49.499 | 1.00 | 26.38 | N |
| ATOM | 2199 | CA | THR | A | 288 | 22.789 | 28.314 | 50.649 | 1.00 | 28.03 | C |

| ATOM | 2200 | C | THR A 288 | 24.099 | 28.578 | 51.384 | 1.00 | 27.91 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2201 | O | THR A 288 | 25.026 | 29.171 | 50.830 | 1.00 | 27.85 | O |
| ATOM | 2202 | CB | THR A 288 | 22.809 | 26.817 | 50.223 | 1.00 | 28.01 | C |
| ATOM | 2203 | OG1 | THR A 288 | 24.014 | 26.552 | 49.492 | 1.00 | 29.51 | O |
| ATOM | 2204 | CG2 | THR A 288 | 21.619 | 26.476 | 49.346 | 1.00 | 27.99 | C |
| ATOM | 2205 | N | PRO A 289 | 24.184 | 28.152 | 52.654 | 1.00 | 28.34 | N |
| ATOM | 2206 | CA | PRO A 289 | 25.411 | 28.354 | 53.429 | 1.00 | 28.59 | C |
| ATOM | 2207 | C | PRO A 289 | 26.337 | 27.198 | 53.075 | 1.00 | 29.01 | C |
| ATOM | 2208 | O | PRO A 289 | 26.293 | 26.141 | 53.696 | 1.00 | 30.14 | O |
| ATOM | 2209 | CB | PRO A 289 | 24.913 | 28.301 | 54.865 | 1.00 | 28.16 | C |
| ATOM | 2210 | CG | PRO A 289 | 23.822 | 27.280 | 54.786 | 1.00 | 27.59 | C |
| ATOM | 2211 | CD | PRO A 289 | 23.093 | 27.659 | 53.516 | 1.00 | 27.76 | C |
| ATOM | 2212 | N | ASP A 290 | 27.165 | 27.402 | 52.059 | 1.00 | 31.55 | N |
| ATOM | 2213 | CA | ASP A 290 | 28.070 | 26.358 | 51.587 | 1.00 | 32.31 | C |
| ATOM | 2214 | C | ASP A 290 | 29.529 | 26.797 | 51.602 | 1.00 | 31.21 | C |
| ATOM | 2215 | O | ASP A 290 | 29.917 | 27.683 | 50.842 | 1.00 | 32.13 | O |
| ATOM | 2216 | CB | ASP A 290 | 27.672 | 25.962 | 50.164 | 1.00 | 34.30 | C |
| ATOM | 2217 | CG | ASP A 290 | 28.352 | 24.692 | 49.700 | 1.00 | 36.12 | C |
| ATOM | 2218 | OD1 | ASP A 290 | 29.603 | 24.628 | 49.723 | 1.00 | 35.60 | O |
| ATOM | 2219 | OD2 | ASP A 290 | 27.622 | 23.758 | 49.308 | 1.00 | 36.06 | O |
| ATOM | 2220 | N | LEU A 291 | 30.333 | 26.161 | 52.451 | 1.00 | 30.99 | N |
| ATOM | 2221 | CA | LEU A 291 | 31.752 | 26.487 | 52.574 | 1.00 | 30.02 | C |
| ATOM | 2222 | C | LEU A 291 | 32.577 | 26.180 | 51.327 | 1.00 | 30.61 | C |
| ATOM | 2223 | O | LEU A 291 | 33.549 | 26.879 | 51.030 | 1.00 | 28.62 | O |
| ATOM | 2224 | CB | LEU A 291 | 32.350 | 25.758 | 53.776 | 1.00 | 29.17 | C |
| ATOM | 2225 | CG | LEU A 291 | 31.861 | 26.270 | 55.130 | 1.00 | 29.18 | C |
| ATOM | 2226 | CD1 | LEU A 291 | 32.440 | 25.415 | 56.239 | 1.00 | 29.37 | C |
| ATOM | 2227 | CD2 | LEU A 291 | 32.273 | 27.728 | 55.300 | 1.00 | 28.61 | C |
| ATOM | 2228 | N | GLU A 292 | 32.188 | 25.136 | 50.599 | 1.00 | 32.20 | N |
| ATOM | 2229 | CA | GLU A 292 | 32.902 | 24.751 | 49.389 | 1.00 | 33.79 | C |
| ATOM | 2230 | C | GLU A 292 | 32.669 | 25.795 | 48.299 | 1.00 | 33.01 | C |
| ATOM | 2231 | O | GLU A 292 | 33.609 | 26.234 | 47.635 | 1.00 | 32.79 | O |
| ATOM | 2232 | CB | GLU A 292 | 32.431 | 23.378 | 48.902 | 1.00 | 36.55 | C |
| ATOM | 2233 | CG | GLU A 292 | 33.570 | 22.414 | 48.600 | 1.00 | 42.06 | C |
| ATOM | 2234 | CD | GLU A 292 | 34.652 | 23.035 | 47.726 | 1.00 | 46.33 | C |
| ATOM | 2235 | OE1 | GLU A 292 | 34.359 | 23.409 | 46.568 | 1.00 | 49.00 | O |
| ATOM | 2236 | OE2 | GLU A 292 | 35.801 | 23.153 | 48.202 | 1.00 | 47.96 | O |
| ATOM | 2237 | N | ALA A 293 | 31.414 | 26.191 | 48.117 | 1.00 | 31.42 | N |
| ATOM | 2238 | CA | ALA A 293 | 31.090 | 27.195 | 47.116 | 1.00 | 31.04 | C |
| ATOM | 2239 | C | ALA A 293 | 31.853 | 28.467 | 47.457 | 1.00 | 30.14 | C |
| ATOM | 2240 | O | ALA A 293 | 32.382 | 29.136 | 46.576 | 1.00 | 31.19 | O |
| ATOM | 2241 | CB | ALA A 293 | 29.589 | 27.463 | 47.101 | 1.00 | 31.42 | C |
| ATOM | 2242 | N | ALA A 294 | 31.925 | 28.787 | 48.746 | 1.00 | 29.74 | N |
| ATOM | 2243 | CA | ALA A 294 | 32.634 | 29.983 | 49.191 | 1.00 | 29.71 | C |
| ATOM | 2244 | C | ALA A 294 | 34.119 | 29.892 | 48.844 | 1.00 | 29.73 | C |
| ATOM | 2245 | O | ALA A 294 | 34.731 | 30.872 | 48.406 | 1.00 | 28.67 | O |
| ATOM | 2246 | CB | ALA A 294 | 32.455 | 30.167 | 50.696 | 1.00 | 29.49 | C |
| ATOM | 2247 | N | ARG A 295 | 34.698 | 28.713 | 49.053 | 1.00 | 30.90 | N |
| ATOM | 2248 | CA | ARG A 295 | 36.109 | 28.495 | 48.747 | 1.00 | 32.95 | C |
| ATOM | 2249 | C | ARG A 295 | 36.309 | 28.785 | 47.266 | 1.00 | 33.27 | C |
| ATOM | 2250 | O | ARG A 295 | 37.170 | 29.577 | 46.871 | 1.00 | 34.29 | O |
| ATOM | 2251 | CB | ARG A 295 | 36.498 | 27.042 | 49.028 | 1.00 | 34.60 | C |
| ATOM | 2252 | CG | ARG A 295 | 37.956 | 26.736 | 48.739 | 1.00 | 39.92 | C |
| ATOM | 2253 | CD | ARG A 295 | 38.165 | 25.278 | 48.354 | 1.00 | 44.25 | C |
| ATOM | 2254 | NE | ARG A 295 | 37.749 | 24.346 | 49.399 | 1.00 | 49.94 | N |
| ATOM | 2255 | CZ | ARG A 295 | 38.301 | 24.274 | 50.607 | 1.00 | 52.46 | C |
| ATOM | 2256 | NH1 | ARG A 295 | 39.301 | 25.086 | 50.934 | 1.00 | 54.24 | N |
| ATOM | 2257 | NH2 | ARG A 295 | 37.859 | 23.382 | 51.486 | 1.00 | 52.63 | N |
| ATOM | 2258 | N | GLN A 296 | 35.481 | 28.138 | 46.456 | 1.00 | 33.35 | N |
| ATOM | 2259 | CA | GLN A 296 | 35.526 | 28.275 | 45.010 | 1.00 | 32.69 | C |
| ATOM | 2260 | C | GLN A 296 | 35.586 | 29.738 | 44.583 | 1.00 | 31.64 | C |
| ATOM | 2261 | O | GLN A 296 | 36.425 | 30.128 | 43.767 | 1.00 | 29.91 | O |
| ATOM | 2262 | CB | GLN A 296 | 34.293 | 27.605 | 44.415 | 1.00 | 33.88 | C |
| ATOM | 2263 | CG | GLN A 296 | 34.443 | 27.181 | 42.982 | 1.00 | 39.85 | C |
| ATOM | 2264 | CD | GLN A 296 | 33.291 | 26.311 | 42.532 | 1.00 | 42.65 | C |
| ATOM | 2265 | OE1 | GLN A 296 | 32.893 | 25.382 | 43.237 | 1.00 | 44.40 | O |
| ATOM | 2266 | NE2 | GLN A 296 | 32.753 | 26.599 | 41.351 | 1.00 | 43.60 | N |
| ATOM | 2267 | N | PHE A 297 | 34.687 | 30.542 | 45.143 | 1.00 | 30.90 | N |
| ATOM | 2268 | CA | PHE A 297 | 34.611 | 31.968 | 44.835 | 1.00 | 28.99 | C |
| ATOM | 2269 | C | PHE A 297 | 35.863 | 32.702 | 45.305 | 1.00 | 28.65 | C |
| ATOM | 2270 | O | PHE A 297 | 36.448 | 33.486 | 44.564 | 1.00 | 28.55 | O |
| ATOM | 2271 | CB | PHE A 297 | 33.374 | 32.570 | 45.504 | 1.00 | 27.33 | C |
| ATOM | 2272 | CG | PHE A 297 | 33.269 | 34.061 | 45.365 | 1.00 | 26.72 | C |
| ATOM | 2273 | CD1 | PHE A 297 | 33.024 | 34.643 | 44.125 | 1.00 | 25.61 | C |
| ATOM | 2274 | CD2 | PHE A 297 | 33.416 | 34.887 | 46.480 | 1.00 | 25.30 | C |
| ATOM | 2275 | CE1 | PHE A 297 | 32.927 | 36.023 | 43.991 | 1.00 | 24.14 | C |
| ATOM | 2276 | CE2 | PHE A 297 | 33.322 | 36.272 | 46.360 | 1.00 | 25.22 | C |
| ATOM | 2277 | CZ | PHE A 297 | 33.076 | 36.841 | 45.113 | 1.00 | 26.42 | C |
| ATOM | 2278 | N | SER A 298 | 36.269 | 32.438 | 46.542 | 1.00 | 30.35 | N |
| ATOM | 2279 | CA | SER A 298 | 37.445 | 33.078 | 47.117 | 1.00 | 30.92 | C |

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ATOM   2280  C    SER A 298      38.735  32.774  46.355  1.00 31.38           C
ATOM   2281  O    SER A 298      39.481  33.684  45.997  1.00 31.06           O
ATOM   2282  CB   SER A 298      37.613  32.650  48.577  1.00 30.79           C
ATOM   2283  OG   SER A 298      38.747  33.276  49.155  1.00 34.38           O
ATOM   2284  N    GLU A 299      38.996  31.494  46.107  1.00 32.73           N
ATOM   2285  CA   GLU A 299      40.215  31.099  45.404  1.00 33.99           C
ATOM   2286  C    GLU A 299      40.280  31.676  44.000  1.00 34.26           C
ATOM   2287  O    GLU A 299      41.345  32.098  43.547  1.00 35.39           O
ATOM   2288  CB   GLU A 299      40.329  29.572  45.351  1.00 33.18           C
ATOM   2289  CG   GLU A 299      40.244  28.920  46.726  1.00 36.68           C
ATOM   2290  CD   GLU A 299      40.659  27.451  46.744  1.00 39.12           C
ATOM   2291  OE1  GLU A 299      40.186  26.669  45.890  1.00 39.04           O
ATOM   2292  OE2  GLU A 299      41.453  27.077  47.635  1.00 40.26           O
ATOM   2293  N    ALA A 300      39.139  31.705  43.317  1.00 33.09           N
ATOM   2294  CA   ALA A 300      39.074  32.231  41.961  1.00 31.92           C
ATOM   2295  C    ALA A 300      39.407  33.714  41.946  1.00 33.60           C
ATOM   2296  O    ALA A 300      40.186  34.181  41.109  1.00 34.21           O
ATOM   2297  CB   ALA A 300      37.688  32.007  41.381  1.00 32.89           C
ATOM   2298  N    VAL A 301      38.810  34.452  42.874  1.00 33.23           N
ATOM   2299  CA   VAL A 301      39.040  35.887  42.968  1.00 33.62           C
ATOM   2300  C    VAL A 301      40.464  36.216  43.411  1.00 33.14           C
ATOM   2301  O    VAL A 301      41.117  37.076  42.827  1.00 33.11           O
ATOM   2302  CB   VAL A 301      38.052  36.543  43.957  1.00 33.31           C
ATOM   2303  CG1  VAL A 301      38.404  38.012  44.151  1.00 32.25           C
ATOM   2304  CG2  VAL A 301      36.630  36.401  43.437  1.00 33.74           C
ATOM   2305  N    LYS A 302      40.942  35.528  44.441  1.00 34.67           N
ATOM   2306  CA   LYS A 302      42.288  35.774  44.958  1.00 37.26           C
ATOM   2307  C    LYS A 302      43.390  35.377  43.977  1.00 37.36           C
ATOM   2308  O    LYS A 302      44.513  35.872  44.069  1.00 37.62           O
ATOM   2309  CB   LYS A 302      42.478  35.055  46.299  1.00 36.69           C
ATOM   2310  CG   LYS A 302      41.737  35.733  47.447  1.00 38.12           C
ATOM   2311  CD   LYS A 302      41.935  35.010  48.768  1.00 37.52           C
ATOM   2312  CE   LYS A 302      41.375  35.827  49.918  1.00 37.74           C
ATOM   2313  NZ   LYS A 302      42.038  37.159  50.006  1.00 36.60           N
ATOM   2314  N    ALA A 303      43.062  34.494  43.037  1.00 38.06           N
ATOM   2315  CA   ALA A 303      44.024  34.057  42.033  1.00 38.45           C
ATOM   2316  C    ALA A 303      44.582  35.277  41.299  1.00 39.72           C
ATOM   2317  O    ALA A 303      45.764  35.317  40.961  1.00 40.48           O
ATOM   2318  CB   ALA A 303      43.362  33.107  41.053  1.00 37.53           C
ATOM   2319  N    GLU A 304      43.731  36.276  41.065  1.00 40.39           N
ATOM   2320  CA   GLU A 304      44.151  37.502  40.388  1.00 39.72           C
ATOM   2321  C    GLU A 304      44.372  38.646  41.373  1.00 38.73           C
ATOM   2322  O    GLU A 304      45.207  39.528  41.142  1.00 36.97           O
ATOM   2323  CB   GLU A 304      43.117  37.918  39.330  1.00 41.91           C
ATOM   2324  CG   GLU A 304      43.334  37.255  37.968  1.00 45.39           C
ATOM   2325  CD   GLU A 304      42.262  37.609  36.943  1.00 48.34           C
ATOM   2326  OE1  GLU A 304      42.030  38.817  36.699  1.00 46.96           O
ATOM   2327  OE2  GLU A 304      41.657  36.671  36.374  1.00 49.15           O
ATOM   2328  N    TYR A 305      43.628  38.620  42.476  1.00 37.35           N
ATOM   2329  CA   TYR A 305      43.731  39.650  43.506  1.00 36.45           C
ATOM   2330  C    TYR A 305      43.976  39.017  44.875  1.00 36.72           C
ATOM   2331  O    TYR A 305      43.071  38.911  45.697  1.00 37.31           O
ATOM   2332  CB   TYR A 305      42.452  40.480  43.516  1.00 35.44           C
ATOM   2333  CG   TYR A 305      42.231  41.231  42.220  1.00 34.85           C
ATOM   2334  CD1  TYR A 305      42.825  42.475  42.002  1.00 34.43           C
ATOM   2335  CD2  TYR A 305      41.464  40.678  41.194  1.00 33.76           C
ATOM   2336  CE1  TYR A 305      42.661  43.150  40.791  1.00 34.81           C
ATOM   2337  CE2  TYR A 305      41.296  41.345  39.977  1.00 33.36           C
ATOM   2338  CZ   TYR A 305      41.899  42.578  39.786  1.00 34.10           C
ATOM   2339  OH   TYR A 305      41.754  43.235  38.587  1.00 34.64           O
ATOM   2340  N    PRO A 306      45.223  38.590  45.130  1.00 37.24           N
ATOM   2341  CA   PRO A 306      45.660  37.953  46.373  1.00 36.79           C
ATOM   2342  C    PRO A 306      45.256  38.651  47.665  1.00 36.29           C
ATOM   2343  O    PRO A 306      44.876  37.987  48.628  1.00 36.30           O
ATOM   2344  CB   PRO A 306      47.176  37.888  46.208  1.00 36.88           C
ATOM   2345  CG   PRO A 306      47.328  37.690  44.744  1.00 38.05           C
ATOM   2346  CD   PRO A 306      46.357  38.709  44.195  1.00 37.76           C
ATOM   2347  N    ASP A 307      45.342  39.980  47.687  1.00 35.91           N
ATOM   2348  CA   ASP A 307      45.004  40.745  48.884  1.00 34.49           C
ATOM   2349  C    ASP A 307      43.552  41.207  48.973  1.00 34.09           C
ATOM   2350  O    ASP A 307      43.186  41.913  49.918  1.00 34.31           O
ATOM   2351  CB   ASP A 307      45.910  41.975  49.005  1.00 36.56           C
ATOM   2352  CG   ASP A 307      47.377  41.614  49.199  1.00 39.46           C
ATOM   2353  OD1  ASP A 307      47.662  40.627  49.911  1.00 39.81           O
ATOM   2354  OD2  ASP A 307      48.247  42.332  48.654  1.00 41.11           O
ATOM   2355  N    GLN A 308      42.725  40.825  48.006  1.00 30.88           N
ATOM   2356  CA   GLN A 308      41.326  41.245  48.024  1.00 30.68           C
ATOM   2357  C    GLN A 308      40.551  40.587  49.159  1.00 28.64           C
ATOM   2358  O    GLN A 308      40.427  39.365  49.207  1.00 28.99           O
ATOM   2359  CB   GLN A 308      40.654  40.922  46.684  1.00 29.31           C
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| ATOM | 2360 | CG | GLN A 308 | 39.191 | 41.345 | 46.586 | 1.00 | 28.81 | C |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 2361 | CD | GLN A 308 | 38.981 | 42.845 | 46.790 | 1.00 | 28.18 | C |
| ATOM | 2362 | OE1 | GLN A 308 | 38.329 | 43.266 | 47.747 | 1.00 | 28.18 | O |
| ATOM | 2363 | NE2 | GLN A 308 | 39.531 | 43.652 | 45.892 | 1.00 | 23.62 | N |
| ATOM | 2364 | N | MET A 309 | 40.041 | 41.403 | 50.078 | 1.00 | 27.16 | N |
| ATOM | 2365 | CA | MET A 309 | 39.261 | 40.886 | 51.201 | 1.00 | 27.79 | C |
| ATOM | 2366 | C | MET A 309 | 37.824 | 40.659 | 50.752 | 1.00 | 25.99 | C |
| ATOM | 2367 | O | MET A 309 | 37.313 | 41.386 | 49.904 | 1.00 | 24.54 | O |
| ATOM | 2368 | CB | MET A 309 | 39.278 | 41.870 | 52.373 | 1.00 | 30.20 | C |
| ATOM | 2369 | CG | MET A 309 | 40.656 | 42.109 | 52.967 | 1.00 | 34.90 | C |
| ATOM | 2370 | SD | MET A 309 | 40.578 | 42.939 | 54.565 | 1.00 | 39.08 | S |
| ATOM | 2371 | CE | MET A 309 | 40.365 | 44.622 | 54.050 | 1.00 | 37.40 | C |
| ATOM | 2372 | N | LEU A 310 | 37.181 | 39.653 | 51.333 | 1.00 | 25.83 | N |
| ATOM | 2373 | CA | LEU A 310 | 35.805 | 39.301 | 50.995 | 1.00 | 23.90 | C |
| ATOM | 2374 | C | LEU A 310 | 34.857 | 39.436 | 52.190 | 1.00 | 23.79 | C |
| ATOM | 2375 | O | LEU A 310 | 35.291 | 39.468 | 53.337 | 1.00 | 23.23 | O |
| ATOM | 2376 | CB | LEU A 310 | 35.762 | 37.859 | 50.494 | 1.00 | 23.79 | C |
| ATOM | 2377 | CG | LEU A 310 | 36.830 | 37.494 | 49.465 | 1.00 | 25.42 | C |
| ATOM | 2378 | CD1 | LEU A 310 | 36.746 | 36.016 | 49.138 | 1.00 | 23.89 | C |
| ATOM | 2379 | CD2 | LEU A 310 | 36.638 | 38.334 | 48.219 | 1.00 | 26.10 | C |
| ATOM | 2380 | N | ALA A 311 | 33.558 | 39.504 | 51.911 | 1.00 | 22.49 | N |
| ATOM | 2381 | CA | ALA A 311 | 32.559 | 39.614 | 52.964 | 1.00 | 21.71 | C |
| ATOM | 2382 | C | ALA A 311 | 31.505 | 38.552 | 52.716 | 1.00 | 21.46 | C |
| ATOM | 2383 | O | ALA A 311 | 31.167 | 38.260 | 51.566 | 1.00 | 20.46 | O |
| ATOM | 2384 | CB | ALA A 311 | 31.926 | 40.997 | 52.962 | 1.00 | 21.11 | C |
| ATOM | 2385 | N | TYR A 312 | 30.984 | 37.975 | 53.793 | 1.00 | 20.31 | N |
| ATOM | 2386 | CA | TYR A 312 | 29.993 | 36.927 | 53.661 | 1.00 | 20.05 | C |
| ATOM | 2387 | C | TYR A 312 | 28.746 | 37.154 | 54.509 | 1.00 | 20.80 | C |
| ATOM | 2388 | O | TYR A 312 | 28.824 | 37.466 | 55.699 | 1.00 | 21.93 | O |
| ATOM | 2389 | CB | TYR A 312 | 30.637 | 35.584 | 54.004 | 1.00 | 18.89 | C |
| ATOM | 2390 | CG | TYR A 312 | 29.813 | 34.388 | 53.610 | 1.00 | 17.55 | C |
| ATOM | 2391 | CD1 | TYR A 312 | 28.714 | 33.992 | 54.372 | 1.00 | 17.30 | C |
| ATOM | 2392 | CD2 | TYR A 312 | 30.120 | 33.659 | 52.462 | 1.00 | 16.97 | C |
| ATOM | 2393 | CE1 | TYR A 312 | 27.944 | 32.900 | 54.002 | 1.00 | 16.37 | C |
| ATOM | 2394 | CE2 | TYR A 312 | 29.352 | 32.561 | 52.079 | 1.00 | 17.89 | C |
| ATOM | 2395 | CZ | TYR A 312 | 28.267 | 32.190 | 52.854 | 1.00 | 17.35 | C |
| ATOM | 2396 | OH | TYR A 312 | 27.495 | 31.122 | 52.476 | 1.00 | 18.37 | O |
| ATOM | 2397 | N | ASN A 313 | 27.595 | 36.985 | 53.873 | 1.00 | 21.18 | N |
| ATOM | 2398 | CA | ASN A 313 | 26.303 | 37.154 | 54.519 | 1.00 | 20.81 | C |
| ATOM | 2399 | C | ASN A 313 | 25.795 | 35.831 | 55.084 | 1.00 | 20.81 | C |
| ATOM | 2400 | O | ASN A 313 | 25.335 | 34.966 | 54.339 | 1.00 | 19.29 | O |
| ATOM | 2401 | CB | ASN A 313 | 25.296 | 37.726 | 53.502 | 1.00 | 21.24 | C |
| ATOM | 2402 | CG | ASN A 313 | 23.852 | 37.669 | 53.992 | 1.00 | 22.92 | C |
| ATOM | 2403 | OD1 | ASN A 313 | 23.590 | 37.478 | 55.178 | 1.00 | 23.95 | O |
| ATOM | 2404 | ND2 | ASN A 313 | 22.907 | 37.849 | 53.070 | 1.00 | 22.92 | N |
| ATOM | 2405 | N | CYS A 314 | 25.911 | 35.664 | 56.399 | 1.00 | 20.85 | N |
| ATOM | 2406 | CA | CYS A 314 | 25.417 | 34.456 | 57.056 | 1.00 | 20.93 | C |
| ATOM | 2407 | C | CYS A 314 | 23.941 | 34.757 | 57.245 | 1.00 | 20.79 | C |
| ATOM | 2408 | O | CYS A 314 | 23.488 | 35.102 | 58.338 | 1.00 | 20.36 | O |
| ATOM | 2409 | CB | CYS A 314 | 26.114 | 34.257 | 58.402 | 1.00 | 21.22 | C |
| ATOM | 2410 | SG | CYS A 314 | 27.898 | 34.012 | 58.238 | 1.00 | 21.53 | S |
| ATOM | 2411 | N | SER A 315 | 23.210 | 34.626 | 56.142 | 1.00 | 19.83 | N |
| ATOM | 2412 | CA | SER A 315 | 21.793 | 34.935 | 56.065 | 1.00 | 19.77 | C |
| ATOM | 2413 | C | SER A 315 | 20.756 | 34.064 | 56.759 | 1.00 | 19.57 | C |
| ATOM | 2414 | O | SER A 315 | 20.791 | 32.839 | 56.668 | 1.00 | 19.56 | O |
| ATOM | 2415 | CB | SER A 315 | 21.406 | 35.055 | 54.591 | 1.00 | 18.64 | C |
| ATOM | 2416 | OG | SER A 315 | 20.003 | 35.159 | 54.443 | 1.00 | 15.56 | O |
| ATOM | 2417 | N | PRO A 316 | 19.804 | 34.704 | 57.462 | 1.00 | 20.79 | N |
| ATOM | 2418 | CA | PRO A 316 | 18.724 | 34.004 | 58.172 | 1.00 | 20.18 | C |
| ATOM | 2419 | C | PRO A 316 | 17.708 | 33.518 | 57.137 | 1.00 | 21.06 | C |
| ATOM | 2420 | O | PRO A 316 | 16.702 | 32.885 | 57.474 | 1.00 | 22.18 | O |
| ATOM | 2421 | CB | PRO A 316 | 18.138 | 35.084 | 59.078 | 1.00 | 18.31 | C |
| ATOM | 2422 | CG | PRO A 316 | 19.287 | 35.993 | 59.324 | 1.00 | 21.39 | C |
| ATOM | 2423 | CD | PRO A 316 | 19.915 | 36.092 | 57.943 | 1.00 | 20.35 | C |
| ATOM | 2424 | N | SER A 317 | 17.962 | 33.853 | 55.874 | 1.00 | 21.97 | N |
| ATOM | 2425 | CA | SER A 317 | 17.090 | 33.422 | 54.786 | 1.00 | 23.08 | C |
| ATOM | 2426 | C | SER A 317 | 17.403 | 31.970 | 54.464 | 1.00 | 23.60 | C |
| ATOM | 2427 | O | SER A 317 | 16.754 | 31.359 | 53.616 | 1.00 | 25.05 | O |
| ATOM | 2428 | CB | SER A 317 | 17.291 | 34.281 | 53.538 | 1.00 | 21.48 | C |
| ATOM | 2429 | OG | SER A 317 | 16.663 | 35.539 | 53.679 | 1.00 | 19.10 | O |
| ATOM | 2430 | N | PHE A 318 | 18.418 | 31.434 | 55.133 | 1.00 | 23.53 | N |
| ATOM | 2431 | CA | PHE A 318 | 18.797 | 30.037 | 54.964 | 1.00 | 24.34 | C |
| ATOM | 2432 | C | PHE A 318 | 18.212 | 29.267 | 56.139 | 1.00 | 25.44 | C |
| ATOM | 2433 | O | PHE A 318 | 18.166 | 29.778 | 57.260 | 1.00 | 25.02 | O |
| ATOM | 2434 | CB | PHE A 318 | 20.315 | 29.833 | 55.028 | 1.00 | 23.27 | C |
| ATOM | 2435 | CG | PHE A 318 | 21.097 | 30.590 | 53.998 | 1.00 | 23.62 | C |
| ATOM | 2436 | CD1 | PHE A 318 | 20.627 | 30.729 | 52.694 | 1.00 | 22.86 | C |
| ATOM | 2437 | CD2 | PHE A 318 | 22.358 | 31.098 | 54.316 | 1.00 | 24.04 | C |
| ATOM | 2438 | CE1 | PHE A 318 | 21.402 | 31.360 | 51.720 | 1.00 | 21.56 | C |
| ATOM | 2439 | CE2 | PHE A 318 | 23.141 | 31.729 | 53.351 | 1.00 | 21.88 | C |

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ATOM   2440  CZ   PHE A 318     22.661  31.859  52.049  1.00 23.49           C
ATOM   2441  N    ASN A 319     17.750  28.049  55.881  1.00 25.71           N
ATOM   2442  CA   ASN A 319     17.254  27.198  56.949  1.00 27.22           C
ATOM   2443  C    ASN A 319     18.539  26.448  57.272  1.00 27.20           C
ATOM   2444  O    ASN A 319     18.858  25.447  56.639  1.00 28.78           O
ATOM   2445  CB   ASN A 319     16.181  26.239  56.435  1.00 27.44           C
ATOM   2446  CG   ASN A 319     15.679  25.302  57.510  1.00 27.71           C
ATOM   2447  OD1  ASN A 319     14.593  24.736  57.391  1.00 28.70           O
ATOM   2448  ND2  ASN A 319     16.470  25.125  58.564  1.00 25.31           N
ATOM   2449  N    TRP A 320     19.282  26.961  58.243  1.00 27.30           N
ATOM   2450  CA   TRP A 320     20.573  26.400  58.611  1.00 28.80           C
ATOM   2451  C    TRP A 320     20.705  24.910  58.908  1.00 30.64           C
ATOM   2452  O    TRP A 320     21.510  24.237  58.270  1.00 31.14           O
ATOM   2453  CB   TRP A 320     21.182  27.225  59.749  1.00 27.17           C
ATOM   2454  CG   TRP A 320     21.594  28.585  59.269  1.00 27.16           C
ATOM   2455  CD1  TRP A 320     20.779  29.657  59.043  1.00 27.00           C
ATOM   2456  CD2  TRP A 320     22.903  28.983  58.840  1.00 27.24           C
ATOM   2457  NE1  TRP A 320     21.494  30.695  58.494  1.00 25.57           N
ATOM   2458  CE2  TRP A 320     22.801  30.309  58.357  1.00 27.67           C
ATOM   2459  CE3  TRP A 320     24.152  28.346  58.810  1.00 26.98           C
ATOM   2460  CZ2  TRP A 320     23.901  31.013  57.850  1.00 28.38           C
ATOM   2461  CZ3  TRP A 320     25.248  29.045  58.304  1.00 28.90           C
ATOM   2462  CH2  TRP A 320     25.112  30.367  57.831  1.00 28.91           C
ATOM   2463  N    LYS A 321     19.940  24.383  59.857  1.00 31.89           N
ATOM   2464  CA   LYS A 321     20.060  22.963  60.167  1.00 33.49           C
ATOM   2465  C    LYS A 321     19.526  22.062  59.055  1.00 34.44           C
ATOM   2466  O    LYS A 321     19.656  20.846  59.112  1.00 34.51           O
ATOM   2467  CB   LYS A 321     19.377  22.648  61.500  1.00 32.36           C
ATOM   2468  CG   LYS A 321     20.135  23.207  62.694  1.00 33.10           C
ATOM   2469  CD   LYS A 321     19.536  22.770  64.022  1.00 35.63           C
ATOM   2470  CE   LYS A 321     19.545  21.254  64.163  1.00 36.29           C
ATOM   2471  NZ   LYS A 321     20.907  20.699  63.942  1.00 36.70           N
ATOM   2472  N    LYS A 322     18.930  22.658  58.034  1.00 36.42           N
ATOM   2473  CA   LYS A 322     18.420  21.871  56.924  1.00 36.77           C
ATOM   2474  C    LYS A 322     19.563  21.615  55.955  1.00 35.92           C
ATOM   2475  O    LYS A 322     19.543  20.653  55.196  1.00 36.72           O
ATOM   2476  CB   LYS A 322     17.291  22.613  56.205  1.00 38.50           C
ATOM   2477  CG   LYS A 322     16.828  21.923  54.930  1.00 40.14           C
ATOM   2478  CD   LYS A 322     15.715  22.689  54.236  1.00 43.73           C
ATOM   2479  CE   LYS A 322     15.233  21.938  53.004  1.00 45.83           C
ATOM   2480  NZ   LYS A 322     14.082  22.597  52.331  1.00 47.26           N
ATOM   2481  N    HIS A 323     20.570  22.478  55.996  1.00 36.22           N
ATOM   2482  CA   HIS A 323     21.720  22.356  55.111  1.00 37.16           C
ATOM   2483  C    HIS A 323     22.999  21.873  55.782  1.00 36.71           C
ATOM   2484  O    HIS A 323     23.837  21.239  55.139  1.00 36.50           O
ATOM   2485  CB   HIS A 323     22.017  23.700  54.448  1.00 39.79           C
ATOM   2486  CG   HIS A 323     20.963  24.149  53.489  1.00 43.55           C
ATOM   2487  ND1  HIS A 323     20.816  23.598  52.234  1.00 44.42           N
ATOM   2488  CD2  HIS A 323     19.994  25.088  53.604  1.00 45.12           C
ATOM   2489  CE1  HIS A 323     19.802  24.178  51.618  1.00 45.78           C
ATOM   2490  NE2  HIS A 323     19.286  25.086  52.428  1.00 46.41           N
ATOM   2491  N    LEU A 324     23.160  22.168  57.067  1.00 34.60           N
ATOM   2492  CA   LEU A 324     24.388  21.788  57.751  1.00 33.21           C
ATOM   2493  C    LEU A 324     24.186  21.089  59.088  1.00 33.65           C
ATOM   2494  O    LEU A 324     23.128  21.209  59.710  1.00 32.91           O
ATOM   2495  CB   LEU A 324     25.243  23.038  57.966  1.00 31.16           C
ATOM   2496  CG   LEU A 324     25.456  23.940  56.748  1.00 30.59           C
ATOM   2497  CD1  LEU A 324     26.150  25.223  57.177  1.00 29.78           C
ATOM   2498  CD2  LEU A 324     26.280  23.208  55.701  1.00 30.10           C
ATOM   2499  N    ASP A 325     25.209  20.349  59.514  1.00 34.02           N
ATOM   2500  CA   ASP A 325     25.173  19.671  60.803  1.00 33.96           C
ATOM   2501  C    ASP A 325     25.717  20.685  61.807  1.00 33.37           C
ATOM   2502  O    ASP A 325     26.317  21.687  61.415  1.00 32.07           O
ATOM   2503  CB   ASP A 325     26.034  18.395  60.803  1.00 33.54           C
ATOM   2504  CG   ASP A 325     27.477  18.643  60.381  1.00 36.19           C
ATOM   2505  OD1  ASP A 325     28.044  19.702  60.714  1.00 38.64           O
ATOM   2506  OD2  ASP A 325     28.060  17.757  59.724  1.00 39.85           O
ATOM   2507  N    ASP A 326     25.513  20.436  63.094  1.00 33.61           N
ATOM   2508  CA   ASP A 326     25.975  21.379  64.100  1.00 34.32           C
ATOM   2509  C    ASP A 326     27.476  21.592  64.085  1.00 33.71           C
ATOM   2510  O    ASP A 326     27.956  22.674  64.418  1.00 34.76           O
ATOM   2511  CB   ASP A 326     25.501  20.942  65.484  1.00 34.49           C
ATOM   2512  CG   ASP A 326     23.988  20.897  65.579  1.00 35.10           C
ATOM   2513  OD1  ASP A 326     23.333  21.771  64.973  1.00 35.11           O
ATOM   2514  OD2  ASP A 326     23.449  20.001  66.255  1.00 37.01           O
ATOM   2515  N    ALA A 327     28.222  20.574  63.678  1.00 33.09           N
ATOM   2516  CA   ALA A 327     29.672  20.698  63.629  1.00 32.60           C
ATOM   2517  C    ALA A 327     30.067  21.766  62.608  1.00 31.72           C
ATOM   2518  O    ALA A 327     30.900  22.629  62.884  1.00 32.60           O
ATOM   2519  CB   ALA A 327.    30.297  19.361  63.263  1.00 31.49           C
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|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2520 | N   | THR | A | 328 | 29.455 | 21.705 | 61.429 | 1.00 | 29.93 | N |
| ATOM | 2521 | CA  | THR | A | 328 | 29.743 | 22.659 | 60.363 | 1.00 | 30.52 | C |
| ATOM | 2522 | C   | THR | A | 328 | 29.283 | 24.069 | 60.735 | 1.00 | 29.19 | C |
| ATOM | 2523 | O   | THR | A | 328 | 29.959 | 25.055 | 60.448 | 1.00 | 29.09 | O |
| ATOM | 2524 | CB  | THR | A | 328 | 29.060 | 22.235 | 59.051 | 1.00 | 31.34 | C |
| ATOM | 2525 | OG1 | THR | A | 328 | 29.451 | 20.893 | 58.722 | 1.00 | 31.60 | O |
| ATOM | 2526 | CG2 | THR | A | 328 | 29.461 | 23.165 | 57.921 | 1.00 | 30.89 | C |
| ATOM | 2527 | N   | ILE | A | 329 | 28.123 | 24.148 | 61.371 | 1.00 | 28.10 | N |
| ATOM | 2528 | CA  | ILE | A | 329 | 27.559 | 25.409 | 61.811 | 1.00 | 26.92 | C |
| ATOM | 2529 | C   | ILE | A | 329 | 28.521 | 26.072 | 62.790 | 1.00 | 27.16 | C |
| ATOM | 2530 | O   | ILE | A | 329 | 28.816 | 27.260 | 62.678 | 1.00 | 26.98 | O |
| ATOM | 2531 | CB  | ILE | A | 329 | 26.196 | 25.170 | 62.503 | 1.00 | 26.82 | C |
| ATOM | 2532 | CG1 | ILE | A | 329 | 25.182 | 24.675 | 61.468 | 1.00 | 25.52 | C |
| ATOM | 2533 | CG2 | ILE | A | 329 | 25.715 | 26.441 | 63.202 | 1.00 | 24.23 | C |
| ATOM | 2534 | CD1 | ILE | A | 329 | 23.835 | 24.288 | 62.044 | 1.00 | 26.59 | C |
| ATOM | 2535 | N   | ALA | A | 330 | 29.017 | 25.289 | 63.744 | 1.00 | 28.11 | N |
| ATOM | 2536 | CA  | ALA | A | 330 | 29.940 | 25.792 | 64.760 | 1.00 | 28.13 | C |
| ATOM | 2537 | C   | ALA | A | 330 | 31.238 | 26.362 | 64.190 | 1.00 | 27.77 | C |
| ATOM | 2538 | O   | ALA | A | 330 | 31.758 | 27.352 | 64.698 | 1.00 | 26.73 | O |
| ATOM | 2539 | CB  | ALA | A | 330 | 30.261 | 24.685 | 65.755 | 1.00 | 27.84 | C |
| ATOM | 2540 | N   | LYS | A | 331 | 31.761 | 25.736 | 63.139 | 1.00 | 27.51 | N |
| ATOM | 2541 | CA  | LYS | A | 331 | 33.010 | 26.195 | 62.531 | 1.00 | 28.55 | C |
| ATOM | 2542 | C   | LYS | A | 331 | 32.792 | 27.058 | 61.287 | 1.00 | 26.94 | C |
| ATOM | 2543 | O   | LYS | A | 331 | 33.750 | 27.531 | 60.679 | 1.00 | 26.34 | O |
| ATOM | 2544 | CB  | LYS | A | 331 | 33.864 | 24.991 | 62.135 | 1.00 | 30.26 | C |
| ATOM | 2545 | CG  | LYS | A | 331 | 33.272 | 24.212 | 60.968 | 1.00 | 33.14 | C |
| ATOM | 2546 | CD  | LYS | A | 331 | 34.158 | 23.065 | 60.519 | 1.00 | 35.26 | C |
| ATOM | 2547 | CE  | LYS | A | 331 | 33.546 | 22.374 | 59.304 | 1.00 | 38.10 | C |
| ATOM | 2548 | NZ  | LYS | A | 331 | 34.318 | 21.176 | 58.867 | 1.00 | 40.08 | N |
| ATOM | 2549 | N   | PHE | A | 332 | 31.537 | 27.265 | 60.908 | 1.00 | 26.79 | N |
| ATOM | 2550 | CA  | PHE | A | 332 | 31.234 | 28.035 | 59.705 | 1.00 | 26.37 | C |
| ATOM | 2551 | C   | PHE | A | 332 | 32.006 | 29.346 | 59.543 | 1.00 | 25.41 | C |
| ATOM | 2552 | O   | PHE | A | 332 | 32.750 | 29.508 | 58.580 | 1.00 | 26.86 | O |
| ATOM | 2553 | CB  | PHE | A | 332 | 29.730 | 28.309 | 59.619 | 1.00 | 27.82 | C |
| ATOM | 2554 | CG  | PHE | A | 332 | 29.262 | 28.665 | 58.233 | 1.00 | 28.85 | C |
| ATOM | 2555 | CD1 | PHE | A | 332 | 29.158 | 27.686 | 57.247 | 1.00 | 29.69 | C |
| ATOM | 2556 | CD2 | PHE | A | 332 | 28.962 | 29.983 | 57.900 | 1.00 | 27.56 | C |
| ATOM | 2557 | CE1 | PHE | A | 332 | 28.764 | 28.018 | 55.947 | 1.00 | 28.97 | C |
| ATOM | 2558 | CE2 | PHE | A | 332 | 28.568 | 30.324 | 56.604 | 1.00 | 27.06 | C |
| ATOM | 2559 | CZ  | PHE | A | 332 | 28.470 | 29.343 | 55.627 | 1.00 | 26.68 | C |
| ATOM | 2560 | N   | GLN | A | 333 | 31.843 | 30.280 | 60.475 | 1.00 | 26.22 | N |
| ATOM | 2561 | CA  | GLN | A | 333 | 32.535 | 31.562 | 60.364 | 1.00 | 26.46 | C |
| ATOM | 2562 | C   | GLN | A | 333 | 34.059 | 31.464 | 60.443 | 1.00 | 27.89 | C |
| ATOM | 2563 | O   | GLN | A | 333 | 34.768 | 32.221 | 59.773 | 1.00 | 26.71 | O |
| ATOM | 2564 | CB  | GLN | A | 333 | 32.041 | 32.550 | 61.426 | 1.00 | 25.85 | C |
| ATOM | 2565 | CG  | GLN | A | 333 | 30.570 | 32.936 | 61.309 | 1.00 | 25.97 | C |
| ATOM | 2566 | CD  | GLN | A | 333 | 30.282 | 34.316 | 61.882 | 1.00 | 26.69 | C |
| ATOM | 2567 | OE1 | GLN | A | 333 | 30.949 | 34.767 | 62.813 | 1.00 | 24.16 | O |
| ATOM | 2568 | NE2 | GLN | A | 333 | 29.276 | 34.989 | 61.330 | 1.00 | 25.04 | N |
| ATOM | 2569 | N   | LYS | A | 334 | 34.569 | 30.547 | 61.260 | 1.00 | 29.15 | N |
| ATOM | 2570 | CA  | LYS | A | 334 | 36.015 | 30.405 | 61.390 | 1.00 | 30.54 | C |
| ATOM | 2571 | C   | LYS | A | 334 | 36.603 | 29.904 | 60.072 | 1.00 | 29.55 | C |
| ATOM | 2572 | O   | LYS | A | 334 | 37.662 | 30.361 | 59.643 | 1.00 | 29.01 | O |
| ATOM | 2573 | CB  | LYS | A | 334 | 36.362 | 29.451 | 62.539 | 1.00 | 31.94 | C |
| ATOM | 2574 | CG  | LYS | A | 334 | 37.853 | 29.392 | 62.851 | 1.00 | 36.22 | C |
| ATOM | 2575 | CD  | LYS | A | 334 | 38.132 | 28.630 | 64.141 | 1.00 | 39.11 | C |
| ATOM | 2576 | CE  | LYS | A | 334 | 39.632 | 28.435 | 64.364 | 1.00 | 40.83 | C |
| ATOM | 2577 | NZ  | LYS | A | 334 | 40.377 | 29.728 | 64.405 | 1.00 | 41.25 | N |
| ATOM | 2578 | N   | GLU | A | 335 | 35.899 | 28.979 | 59.427 | 1.00 | 29.42 | N |
| ATOM | 2579 | CA  | GLU | A | 335 | 36.335 | 28.430 | 58.145 | 1.00 | 30.43 | C |
| ATOM | 2580 | C   | GLU | A | 335 | 36.341 | 29.510 | 57.065 | 1.00 | 29.84 | C |
| ATOM | 2581 | O   | GLU | A | 335 | 37.263 | 29.586 | 56.250 | 1.00 | 31.11 | O |
| ATOM | 2582 | CB  | GLU | A | 335 | 35.407 | 27.294 | 57.721 | 1.00 | 33.81 | C |
| ATOM | 2583 | CG  | GLU | A | 335 | 35.590 | 26.019 | 58.521 | 1.00 | 38.71 | C |
| ATOM | 2584 | CD  | GLU | A | 335 | 36.949 | 25.394 | 58.281 | 1.00 | 42.69 | C |
| ATOM | 2585 | OE1 | GLU | A | 335 | 37.231 | 25.039 | 57.117 | 1.00 | 44.77 | O |
| ATOM | 2586 | OE2 | GLU | A | 335 | 37.735 | 25.262 | 59.246 | 1.00 | 44.18 | O |
| ATOM | 2587 | N   | LEU | A | 336 | 35.302 | 30.337 | 57.056 | 1.00 | 28.30 | N |
| ATOM | 2588 | CA  | LEU | A | 336 | 35.199 | 31.418 | 56.087 | 1.00 | 27.55 | C |
| ATOM | 2589 | C   | LEU | A | 336 | 36.343 | 32.406 | 56.257 | 1.00 | 27.08 | C |
| ATOM | 2590 | O   | LEU | A | 336 | 36.929 | 32.864 | 55.275 | 1.00 | 26.77 | O |
| ATOM | 2591 | CB  | LEU | A | 336 | 33.865 | 32.161 | 56.247 | 1.00 | 26.10 | C |
| ATOM | 2592 | CG  | LEU | A | 336 | 32.618 | 31.425 | 55.772 | 1.00 | 23.92 | C |
| ATOM | 2593 | CD1 | LEU | A | 336 | 31.375 | 32.236 | 56.104 | 1.00 | 24.04 | C |
| ATOM | 2594 | CD2 | LEU | A | 336 | 32.732 | 31.188 | 54.274 | 1.00 | 22.90 | C |
| ATOM | 2595 | N   | ALA | A | 337 | 36.652 | 32.740 | 57.506 | 1.00 | 27.07 | N |
| ATOM | 2596 | CA  | ALA | A | 337 | 37.720 | 33.691 | 57.781 | 1.00 | 27.74 | C |
| ATOM | 2597 | C   | ALA | A | 337 | 39.031 | 33.159 | 57.229 | 1.00 | 28.84 | C |
| ATOM | 2598 | O   | ALA | A | 337 | 39.830 | 33.905 | 56.662 | 1.00 | 28.05 | O |
| ATOM | 2599 | CB  | ALA | A | 337 | 37.835 | 33.934 | 59.279 | 1.00 | 27.26 | C |

| ATOM | 2600 | N   | ALA | A 338 | 39.240 | 31.856 | 57.385 | 1.00 | 29.84 | N |
|------|------|-----|-----|-------|--------|--------|--------|------|-------|---|
| ATOM | 2601 | CA  | ALA | A 338 | 40.459 | 31.224 | 56.905 | 1.00 | 30.77 | C |
| ATOM | 2602 | C   | ALA | A 338 | 40.536 | 31.318 | 55.389 | 1.00 | 31.83 | C |
| ATOM | 2603 | O   | ALA | A 338 | 41.608 | 31.160 | 54.807 | 1.00 | 33.02 | O |
| ATOM | 2604 | CB  | ALA | A 338 | 40.503 | 29.764 | 57.347 | 1.00 | 30.89 | C |
| ATOM | 2605 | N   | MET | A 339 | 39.400 | 31.583 | 54.747 | 1.00 | 30.74 | N |
| ATOM | 2606 | CA  | MET | A 339 | 39.378 | 31.691 | 53.294 | 1.00 | 29.13 | C |
| ATOM | 2607 | C   | MET | A 339 | 39.273 | 33.125 | 52.774 | 1.00 | 29.78 | C |
| ATOM | 2608 | O   | MET | A 339 | 38.903 | 33.350 | 51.624 | 1.00 | 30.58 | O |
| ATOM | 2609 | CB  | MET | A 339 | 38.254 | 30.822 | 52.720 | 1.00 | 30.26 | C |
| ATOM | 2610 | CG  | MET | A 339 | 38.403 | 29.345 | 53.095 | 1.00 | 30.33 | C |
| ATOM | 2611 | SD  | MET | A 339 | 37.331 | 28.195 | 52.218 | 1.00 | 33.92 | S |
| ATOM | 2612 | CE  | MET | A 339 | 35.743 | 28.526 | 53.017 | 1.00 | 33.43 | C |
| ATOM | 2613 | N   | GLY | A 340 | 39.603 | 34.095 | 53.624 | 1.00 | 28.27 | N |
| ATOM | 2614 | CA  | GLY | A 340 | 39.571 | 35.486 | 53.201 | 1.00 | 28.11 | C |
| ATOM | 2615 | C   | GLY | A 340 | 38.309 | 36.289 | 53.466 | 1.00 | 27.80 | C |
| ATOM | 2616 | O   | GLY | A 340 | 38.236 | 37.465 | 53.100 | 1.00 | 27.57 | O |
| ATOM | 2617 | N   | PHE | A 341 | 37.309 | 35.674 | 54.085 | 1.00 | 26.80 | N |
| ATOM | 2618 | CA  | PHE | A 341 | 36.073 | 36.390 | 54.381 | 1.00 | 27.42 | C |
| ATOM | 2619 | C   | PHE | A 341 | 36.227 | 37.095 | 55.725 | 1.00 | 26.67 | C |
| ATOM | 2620 | O   | PHE | A 341 | 35.872 | 36.549 | 56.773 | 1.00 | 26.41 | O |
| ATOM | 2621 | CB  | PHE | A 341 | 34.896 | 35.410 | 54.394 | 1.00 | 28.03 | C |
| ATOM | 2622 | CG  | PHE | A 341 | 34.598 | 34.810 | 53.045 | 1.00 | 28.72 | C |
| ATOM | 2623 | CD1 | PHE | A 341 | 33.988 | 35.571 | 52.049 | 1.00 | 30.11 | C |
| ATOM | 2624 | CD2 | PHE | A 341 | 34.961 | 33.500 | 52.753 | 1.00 | 29.36 | C |
| ATOM | 2625 | CE1 | PHE | A 341 | 33.746 | 35.038 | 50.784 | 1.00 | 28.32 | C |
| ATOM | 2626 | CE2 | PHE | A 341 | 34.724 | 32.958 | 51.489 | 1.00 | 29.41 | C |
| ATOM | 2627 | CZ  | PHE | A 341 | 34.116 | 33.729 | 50.505 | 1.00 | 29.55 | C |
| ATOM | 2628 | N   | LYS | A 342 | 36.760 | 38.317 | 55.679 | 1.00 | 27.00 | N |
| ATOM | 2629 | CA  | LYS | A 342 | 37.014 | 39.106 | 56.884 | 1.00 | 27.09 | C |
| ATOM | 2630 | C   | LYS | A 342 | 35.833 | 39.856 | 57.501 | 1.00 | 26.38 | C |
| ATOM | 2631 | O   | LYS | A 342 | 35.906 | 40.268 | 58.658 | 1.00 | 26.64 | O |
| ATOM | 2632 | CB  | LYS | A 342 | 38.175 | 40.069 | 56.629 | 1.00 | 28.44 | C |
| ATOM | 2633 | CG  | LYS | A 342 | 39.474 | 39.353 | 56.285 | 1.00 | 31.41 | C |
| ATOM | 2634 | CD  | LYS | A 342 | 39.800 | 38.282 | 57.326 | 1.00 | 33.62 | C |
| ATOM | 2635 | CE  | LYS | A 342 | 41.046 | 37.498 | 56.949 | 1.00 | 35.98 | C |
| ATOM | 2636 | NZ  | LYS | A 342 | 41.303 | 36.368 | 57.892 | 1.00 | 37.28 | N |
| ATOM | 2637 | N   | PHE | A 343 | 34.760 | 40.060 | 56.741 | 1.00 | 24.13 | N |
| ATOM | 2638 | CA  | PHE | A 343 | 33.582 | 40.713 | 57.307 | 1.00 | 23.07 | C |
| ATOM | 2639 | C   | PHE | A 343 | 32.406 | 39.780 | 57.114 | 1.00 | 21.66 | C |
| ATOM | 2640 | O   | PHE | A 343 | 31.985 | 39.521 | 55.990 | 1.00 | 20.02 | O |
| ATOM | 2641 | CB  | PHE | A 343 | 33.273 | 42.058 | 56.645 | 1.00 | 21.52 | C |
| ATOM | 2642 | CG  | PHE | A 343 | 32.155 | 42.807 | 57.320 | 1.00 | 21.33 | C |
| ATOM | 2643 | CD1 | PHE | A 343 | 32.300 | 43.267 | 58.627 | 1.00 | 21.64 | C |
| ATOM | 2644 | CD2 | PHE | A 343 | 30.944 | 43.029 | 56.666 | 1.00 | 22.51 | C |
| ATOM | 2645 | CE1 | PHE | A 343 | 31.264 | 43.933 | 59.277 | 1.00 | 20.80 | C |
| ATOM | 2646 | CE2 | PHE | A 343 | 29.895 | 43.697 | 57.307 | 1.00 | 21.55 | C |
| ATOM | 2647 | CZ  | PHE | A 343 | 30.057 | 44.148 | 58.616 | 1.00 | 22.99 | C |
| ATOM | 2648 | N   | GLN | A 344 | 31.895 | 39.263 | 58.224 | 1.00 | 21.57 | N |
| ATOM | 2649 | CA  | GLN | A 344 | 30.773 | 38.338 | 58.200 | 1.00 | 20.32 | C |
| ATOM | 2650 | C   | GLN | A 344 | 29.660 | 38.929 | 59.038 | 1.00 | 19.48 | C |
| ATOM | 2651 | O   | GLN | A 344 | 29.905 | 39.515 | 60.094 | 1.00 | 18.19 | O |
| ATOM | 2652 | CB  | GLN | A 344 | 31.215 | 36.984 | 58.750 | 1.00 | 21.38 | C |
| ATOM | 2653 | CG  | GLN | A 344 | 32.456 | 36.452 | 58.048 | 1.00 | 23.34 | C |
| ATOM | 2654 | CD  | GLN | A 344 | 32.915 | 35.124 | 58.596 | 1.00 | 24.52 | C |
| ATOM | 2655 | OE1 | GLN | A 344 | 34.065 | 34.736 | 58.417 | 1.00 | 25.96 | O |
| ATOM | 2656 | NE2 | GLN | A 344 | 32.018 | 34.416 | 59.260 | 1.00 | 24.94 | N |
| ATOM | 2657 | N   | PHE | A 345 | 28.427 | 38.762 | 58.580 | 1.00 | 19.34 | N |
| ATOM | 2658 | CA  | PHE | A 345 | 27.306 | 39.356 | 59.292 | 1.00 | 18.91 | C |
| ATOM | 2659 | C   | PHE | A 345 | 25.979 | 38.632 | 59.113 | 1.00 | 17.59 | C |
| ATOM | 2660 | O   | PHE | A 345 | 25.694 | 38.080 | 58.054 | 1.00 | 18.33 | O |
| ATOM | 2661 | CB  | PHE | A 345 | 27.152 | 40.797 | 58.818 | 1.00 | 17.87 | C |
| ATOM | 2662 | CG  | PHE | A 345 | 27.082 | 40.928 | 57.317 | 1.00 | 20.67 | C |
| ATOM | 2663 | CD1 | PHE | A 345 | 28.235 | 40.805 | 56.540 | 1.00 | 19.05 | C |
| ATOM | 2664 | CD2 | PHE | A 345 | 25.860 | 41.127 | 56.677 | 1.00 | 19.21 | C |
| ATOM | 2665 | CE1 | PHE | A 345 | 28.172 | 40.875 | 55.149 | 1.00 | 22.94 | C |
| ATOM | 2666 | CE2 | PHE | A 345 | 25.780 | 41.199 | 55.284 | 1.00 | 21.27 | C |
| ATOM | 2667 | CZ  | PHE | A 345 | 26.936 | 41.073 | 54.513 | 1.00 | 21.25 | C |
| ATOM | 2668 | N   | ILE | A 346 | 25.172 | 38.630 | 60.163 | 1.00 | 17.40 | N |
| ATOM | 2669 | CA  | ILE | A 346 | 23.860 | 38.015 | 60.100 | 1.00 | 18.15 | C |
| ATOM | 2670 | C   | ILE | A 346 | 22.910 | 39.179 | 59.861 | 1.00 | 18.44 | C |
| ATOM | 2671 | O   | ILE | A 346 | 22.544 | 39.896 | 60.791 | 1.00 | 19.83 | O |
| ATOM | 2672 | CB  | ILE | A 346 | 23.504 | 37.304 | 61.414 | 1.00 | 16.64 | C |
| ATOM | 2673 | CG1 | ILE | A 346 | 24.460 | 36.128 | 61.632 | 1.00 | 15.94 | C |
| ATOM | 2674 | CG2 | ILE | A 346 | 22.061 | 36.813 | 61.364 | 1.00 | 16.65 | C |
| ATOM | 2675 | CD1 | ILE | A 346 | 24.199 | 35.338 | 62.912 | 1.00 | 12.80 | C |
| ATOM | 2676 | N   | THR | A 347 | 22.540 | 39.367 | 58.598 | 1.00 | 18.96 | N |
| ATOM | 2677 | CA  | THR | A 347 | 21.665 | 40.459 | 58.174 | 1.00 | 18.38 | C |
| ATOM | 2678 | C   | THR | A 347 | 20.423 | 40.747 | 59.009 | 1.00 | 18.25 | C |
| ATOM | 2679 | O   | THR | A 347 | 20.259 | 41.847 | 59.533 | 1.00 | 17.12 | O |

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ATOM   2680  CB   THR A 347      21.190  40.255  56.712  1.00 17.85           C
ATOM   2681  OG1  THR A 347      20.629  38.947  56.575  1.00 17.80           O
ATOM   2682  CG2  THR A 347      22.349  40.404  55.733  1.00 17.32           C
ATOM   2683  N    LEU A 348      19.552  39.755  59.140  1.00 20.41           N
ATOM   2684  CA   LEU A 348      18.290  39.947  59.843  1.00 18.93           C
ATOM   2685  C    LEU A 348      18.240  39.547  61.313  1.00 19.94           C
ATOM   2686  O    LEU A 348      17.166  39.227  61.841  1.00 17.98           O
ATOM   2687  CB   LEU A 348      17.192  39.219  59.069  1.00 18.74           C
ATOM   2688  CG   LEU A 348      17.292  39.391  57.547  1.00 21.50           C
ATOM   2689  CD1  LEU A 348      16.098  38.739  56.873  1.00 18.37           C
ATOM   2690  CD2  LEU A 348      17.370  40.871  57.196  1.00 19.97           C
ATOM   2691  N    ALA A 349      19.388  39.587  61.982  1.00 19.06           N
ATOM   2692  CA   ALA A 349      19.445  39.215  63.392  1.00 19.59           C
ATOM   2693  C    ALA A 349      18.491  40.062  64.244  1.00 17.56           C
ATOM   2694  O    ALA A 349      17.801  39.540  65.119  1.00 17.59           O
ATOM   2695  CB   ALA A 349      20.883  39.345  63.914  1.00 19.73           C
ATOM   2696  N    GLY A 350      18.448  41.364  63.975  1.00 16.46           N
ATOM   2697  CA   GLY A 350      17.585  42.248  64.738  1.00 16.04           C
ATOM   2698  C    GLY A 350      16.107  41.956  64.558  1.00 17.45           C
ATOM   2699  O    GLY A 350      15.344  41.932  65.528  1.00 16.25           O
ATOM   2700  N    PHE A 351      15.700  41.752  63.310  1.00 16.31           N
ATOM   2701  CA   PHE A 351      14.309  41.460  62.997  1.00 17.17           C
ATOM   2702  C    PHE A 351      13.855  40.221  63.752  1.00 16.55           C
ATOM   2703  O    PHE A 351      12.811  40.215  64.407  1.00 18.07           O
ATOM   2704  CB   PHE A 351      14.139  41.205  61.492  1.00 15.61           C
ATOM   2705  CG   PHE A 351      12.763  40.712  61.105  1.00 17.16           C
ATOM   2706  CD1  PHE A 351      11.735  41.612  60.813  1.00 19.09           C
ATOM   2707  CD2  PHE A 351      12.495  39.347  61.029  1.00 17.09           C
ATOM   2708  CE1  PHE A 351      10.457  41.154  60.446  1.00 19.81           C
ATOM   2709  CE2  PHE A 351      11.227  38.874  60.667  1.00 18.94           C
ATOM   2710  CZ   PHE A 351      10.204  39.778  60.373  1.00 20.08           C
ATOM   2711  N    HIS A 352      14.642  39.161  63.657  1.00 16.06           N
ATOM   2712  CA   HIS A 352      14.269  37.918  64.307  1.00 17.30           C
ATOM   2713  C    HIS A 352      14.318  37.963  65.821  1.00 16.57           C
ATOM   2714  O    HIS A 352      13.432  37.433  66.491  1.00 15.74           O
ATOM   2715  CB   HIS A 352      15.109  36.775  63.735  1.00 15.38           C
ATOM   2716  CG   HIS A 352      14.700  36.391  62.348  1.00 15.69           C
ATOM   2717  ND1  HIS A 352      13.537  35.701  62.083  1.00 15.03           N
ATOM   2718  CD2  HIS A 352      15.258  36.662  61.142  1.00 15.69           C
ATOM   2719  CE1  HIS A 352      13.395  35.565  60.776  1.00 15.62           C
ATOM   2720  NE2  HIS A 352      14.427  36.138  60.183  1.00 15.40           N
ATOM   2721  N    ALA A 353      15.329  38.621  66.370  1.00 17.26           N
ATOM   2722  CA   ALA A 353      15.428  38.706  67.820  1.00 17.34           C
ATOM   2723  C    ALA A 353      14.264  39.530  68.356  1.00 17.01           C
ATOM   2724  O    ALA A 353      13.662  39.180  69.372  1.00 17.56           O
ATOM   2725  CB   ALA A 353      16.753  39.334  68.222  1.00 15.55           C
ATOM   2726  N    LEU A 354      13.939  40.615  67.657  1.00 16.30           N
ATOM   2727  CA   LEU A 354      12.855  41.490  68.078  1.00 17.01           C
ATOM   2728  C    LEU A 354      11.488  40.828  67.952  1.00 16.67           C
ATOM   2729  O    LEU A 354      10.707  40.834  68.897  1.00 18.45           O
ATOM   2730  CB   LEU A 354      12.882  42.801  67.271  1.00 14.21           C
ATOM   2731  CG   LEU A 354      11.836  43.855  67.665  1.00 16.38           C
ATOM   2732  CD1  LEU A 354      12.250  45.229  67.135  1.00 13.95           C
ATOM   2733  CD2  LEU A 354      10.451  43.452  67.127  1.00 13.96           C
ATOM   2734  N    ASN A 355      11.199  40.269  66.781  1.00 19.24           N
ATOM   2735  CA   ASN A 355       9.917  39.615  66.534  1.00 18.44           C
ATOM   2736  C    ASN A 355       9.707  38.395  67.432  1.00 19.80           C
ATOM   2737  O    ASN A 355       8.642  38.233  68.024  1.00 17.79           O
ATOM   2738  CB   ASN A 355       9.811  39.207  65.058  1.00 17.47           C
ATOM   2739  CG   ASN A 355       9.383  40.364  64.156  1.00 19.65           C
ATOM   2740  OD1  ASN A 355       8.189  40.633  63.994  1.00 17.08           O
ATOM   2741  ND2  ASN A 355      10.359  41.055  63.570  1.00 16.70           N
ATOM   2742  N    TYR A 356      10.721  37.542  67.547  1.00 20.23           N
ATOM   2743  CA   TYR A 356      10.579  36.358  68.387  1.00 21.47           C
ATOM   2744  C    TYR A 356      10.381  36.652  69.877  1.00 21.07           C
ATOM   2745  O    TYR A 356       9.474  36.096  70.505  1.00 20.30           O
ATOM   2746  CB   TYR A 356      11.780  35.414  68.243  1.00 20.43           C
ATOM   2747  CG   TYR A 356      11.626  34.212  69.140  1.00 23.02           C
ATOM   2748  CD1  TYR A 356      10.579  33.310  68.944  1.00 25.75           C
ATOM   2749  CD2  TYR A 356      12.437  34.039  70.258  1.00 24.34           C
ATOM   2750  CE1  TYR A 356      10.335  32.279  69.842  1.00 25.52           C
ATOM   2751  CE2  TYR A 356      12.199  33.005  71.167  1.00 24.66           C
ATOM   2752  CZ   TYR A 356      11.144  32.137  70.950  1.00 25.45           C
ATOM   2753  OH   TYR A 356      10.869  31.147  71.858  1.00 29.81           O
ATOM   2754  N    SER A 357      11.231  37.508  70.443  1.00 20.74           N
ATOM   2755  CA   SER A 357      11.139  37.820  71.866  1.00 20.00           C
ATOM   2756  C    SER A 357       9.811  38.454  72.247  1.00 20.76           C
ATOM   2757  O    SER A 357       9.276  38.166  73.323  1.00 21.70           O
ATOM   2758  CB   SER A 357      12.296  38.725  72.312  1.00 17.80           C
ATOM   2759  OG   SER A 357      12.294  39.966  71.637  1.00 18.82           O
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 2760 | N | MET A 358 | 9.270 | 39.309 | 71.380 | 1.00 | 19.48 | | N |
| ATOM | 2761 | CA | MET A 358 | 7.997 | 39.943 | 71.691 | 1.00 | 18.78 | | C |
| ATOM | 2762 | C | MET A 358 | 6.859 | 38.951 | 71.553 | 1.00 | 18.27 | | C |
| ATOM | 2763 | O | MET A 358 | 5.901 | 38.993 | 72.328 | 1.00 | 17.54 | | O |
| ATOM | 2764 | CB | MET A 358 | 7.731 | 41.150 | 70.797 | 1.00 | 18.80 | | C |
| ATOM | 2765 | CG | MET A 358 | 6.478 | 41.909 | 71.204 | 1.00 | 16.77 | | C |
| ATOM | 2766 | SD | MET A 358 | 6.366 | 42.220 | 73.001 | 1.00 | 18.80 | | S |
| ATOM | 2767 | CE | MET A 358 | 7.641 | 43.440 | 73.229 | 1.00 | 16.92 | | C |
| ATOM | 2768 | N | PHE A 359 | 6.953 | 38.060 | 70.570 | 1.00 | 18.07 | | N |
| ATOM | 2769 | CA | PHE A 359 | 5.914 | 37.052 | 70.405 | 1.00 | 20.24 | | C |
| ATOM | 2770 | C | PHE A 359 | 5.941 | 36.156 | 71.633 | 1.00 | 20.98 | | C |
| ATOM | 2771 | O | PHE A 359 | 4.908 | 35.874 | 72.230 | 1.00 | 21.53 | | O |
| ATOM | 2772 | CB | PHE A 359 | 6.146 | 36.178 | 69.173 | 1.00 | 20.83 | | C |
| ATOM | 2773 | CG | PHE A 359 | 5.172 | 35.033 | 69.067 | 1.00 | 21.79 | | C |
| ATOM | 2774 | CD1 | PHE A 359 | 3.905 | 35.227 | 68.521 | 1.00 | 21.00 | | C |
| ATOM | 2775 | CD2 | PHE A 359 | 5.488 | 33.786 | 69.597 | 1.00 | 19.89 | | C |
| ATOM | 2776 | CE1 | PHE A 359 | 2.962 | 34.198 | 68.511 | 1.00 | 21.98 | | C |
| ATOM | 2777 | CE2 | PHE A 359 | 4.551 | 32.748 | 69.593 | 1.00 | 21.47 | | C |
| ATOM | 2778 | CZ | PHE A 359 | 3.288 | 32.955 | 69.052 | 1.00 | 21.82 | | C |
| ATOM | 2779 | N | ASP A 360 | 7.136 | 35.718 | 72.011 | 1.00 | 21.55 | | N |
| ATOM | 2780 | CA | ASP A 360 | 7.279 | 34.843 | 73.164 | 1.00 | 22.90 | | C |
| ATOM | 2781 | C | ASP A 360 | 6.683 | 35.448 | 74.429 | 1.00 | 23.51 | | C |
| ATOM | 2782 | O | ASP A 360 | 5.874 | 34.809 | 75.105 | 1.00 | 22.81 | | O |
| ATOM | 2783 | CB | ASP A 360 | 8.745 | 34.516 | 73.403 | 1.00 | 23.71 | | C |
| ATOM | 2784 | CG | ASP A 360 | 8.931 | 33.499 | 74.505 | 1.00 | 26.91 | | C |
| ATOM | 2785 | OD1 | ASP A 360 | 8.355 | 32.393 | 74.394 | 1.00 | 26.88 | | O |
| ATOM | 2786 | OD2 | ASP A 360 | 9.647 | 33.805 | 75.480 | 1.00 | 28.34 | | O |
| ATOM | 2787 | N | LEU A 361 | 7.089 | 36.677 | 74.746 | 1.00 | 23.00 | | N |
| ATOM | 2788 | CA | LEU A 361 | 6.594 | 37.378 | 75.930 | 1.00 | 21.21 | | C |
| ATOM | 2789 | C | LEU A 361 | 5.085 | 37.627 | 75.840 | 1.00 | 21.52 | | C |
| ATOM | 2790 | O | LEU A 361 | 4.341 | 37.350 | 76.780 | 1.00 | 22.32 | | O |
| ATOM | 2791 | CB | LEU A 361 | 7.319 | 38.719 | 76.093 | 1.00 | 19.57 | | C |
| ATOM | 2792 | CG | LEU A 361 | 6.859 | 39.613 | 77.258 | 1.00 | 20.67 | | C |
| ATOM | 2793 | CD1 | LEU A 361 | 7.087 | 38.896 | 78.586 | 1.00 | 18.21 | | C |
| ATOM | 2794 | CD2 | LEU A 361 | 7.617 | 40.939 | 77.238 | 1.00 | 18.33 | | C |
| ATOM | 2795 | N | ALA A 362 | 4.636 | 38.148 | 74.704 | 1.00 | 19.92 | | N |
| ATOM | 2796 | CA | ALA A 362 | 3.220 | 38.432 | 74.520 | 1.00 | 19.64 | | C |
| ATOM | 2797 | C | ALA A 362 | 2.374 | 37.167 | 74.651 | 1.00 | 20.52 | | C |
| ATOM | 2798 | O | ALA A 362 | 1.296 | 37.196 | 75.237 | 1.00 | 21.75 | | O |
| ATOM | 2799 | CB | ALA A 362 | 2.991 | 39.082 | 73.160 | 1.00 | 15.22 | | C |
| ATOM | 2800 | N | TYR A 363 | 2.862 | 36.057 | 74.106 | 1.00 | 21.38 | | N |
| ATOM | 2801 | CA | TYR A 363 | 2.120 | 34.802 | 74.174 | 1.00 | 22.82 | | C |
| ATOM | 2802 | C | TYR A 363 | 1.942 | 34.358 | 75.625 | 1.00 | 23.59 | | C |
| ATOM | 2803 | O | TYR A 363 | 0.835 | 34.024 | 76.056 | 1.00 | 23.24 | | O |
| ATOM | 2804 | CB | TYR A 363 | 2.851 | 33.704 | 73.405 | 1.00 | 23.95 | | C |
| ATOM | 2805 | CG | TYR A 363 | 2.083 | 32.404 | 73.345 | 1.00 | 27.33 | | C |
| ATOM | 2806 | CD1 | TYR A 363 | 1.012 | 32.248 | 72.464 | 1.00 | 26.39 | | C |
| ATOM | 2807 | CD2 | TYR A 363 | 2.409 | 31.336 | 74.188 | 1.00 | 27.07 | | C |
| ATOM | 2808 | CE1 | TYR A 363 | 0.284 | 31.068 | 72.416 | 1.00 | 28.92 | | C |
| ATOM | 2809 | CE2 | TYR A 363 | 1.678 | 30.141 | 74.151 | 1.00 | 29.32 | | C |
| ATOM | 2810 | CZ | TYR A 363 | 0.619 | 30.020 | 73.258 | 1.00 | 29.96 | | C |
| ATOM | 2811 | OH | TYR A 363 | -0.098 | 28.851 | 73.184 | 1.00 | 32.38 | | O |
| ATOM | 2812 | N | GLY A 364 | 3.045 | 34.351 | 76.370 | 1.00 | 23.56 | | N |
| ATOM | 2813 | CA | GLY A 364 | 2.996 | 33.946 | 77.763 | 1.00 | 23.48 | | C |
| ATOM | 2814 | C | GLY A 364 | 2.181 | 34.929 | 78.577 | 1.00 | 22.60 | | C |
| ATOM | 2815 | O | GLY A 364 | 1.477 | 34.550 | 79.510 | 1.00 | 22.36 | | O |
| ATOM | 2816 | N | TYR A 365 | 2.279 | 36.202 | 78.214 | 1.00 | 22.83 | | N |
| ATOM | 2817 | CA | TYR A 365 | 1.553 | 37.265 | 78.894 | 1.00 | 22.65 | | C |
| ATOM | 2818 | C | TYR A 365 | 0.059 | 37.038 | 78.681 | 1.00 | 23.65 | | C |
| ATOM | 2819 | O | TYR A 365 | -0.749 | 37.218 | 79.591 | 1.00 | 24.23 | | O |
| ATOM | 2820 | CB | TYR A 365 | 1.979 | 38.617 | 78.312 | 1.00 | 21.23 | | C |
| ATOM | 2821 | CG | TYR A 365 | 1.341 | 39.834 | 78.944 | 1.00 | 20.62 | | C |
| ATOM | 2822 | CD1 | TYR A 365 | 1.596 | 40.177 | 80.271 | 1.00 | 19.89 | | C |
| ATOM | 2823 | CD2 | TYR A 365 | 0.523 | 40.681 | 78.192 | 1.00 | 21.47 | | C |
| ATOM | 2824 | CE1 | TYR A 365 | 1.054 | 41.342 | 80.832 | 1.00 | 20.67 | | C |
| ATOM | 2825 | CE2 | TYR A 365 | -0.019 | 41.842 | 78.737 | 1.00 | 20.09 | | C |
| ATOM | 2826 | CZ | TYR A 365 | 0.251 | 42.167 | 80.057 | 1.00 | 20.34 | | C |
| ATOM | 2827 | OH | TYR A 365 | -0.280 | 43.318 | 80.591 | 1.00 | 22.94 | | O |
| ATOM | 2828 | N | ALA A 366 | -0.304 | 36.635 | 77.469 | 1.00 | 23.53 | | N |
| ATOM | 2829 | CA | ALA A 366 | -1.702 | 36.385 | 77.147 | 1.00 | 25.27 | | C |
| ATOM | 2830 | C | ALA A 366 | -2.285 | 35.251 | 77.987 | 1.00 | 26.29 | | C |
| ATOM | 2831 | O | ALA A 366 | -3.477 | 35.246 | 78.285 | 1.00 | 27.00 | | O |
| ATOM | 2832 | CB | ALA A 366 | -1.841 | 36.057 | 75.672 | 1.00 | 23.13 | | C |
| ATOM | 2833 | N | GLN A 367 | -1.441 | 34.298 | 78.372 | 1.00 | 27.88 | | N |
| ATOM | 2834 | CA | GLN A 367 | -1.890 | 33.149 | 79.157 | 1.00 | 30.34 | | C |
| ATOM | 2835 | C | GLN A 367 | -1.740 | 33.316 | 80.674 | 1.00 | 29.88 | | C |
| ATOM | 2836 | O | GLN A 367 | -2.661 | 32.997 | 81.427 | 1.00 | 29.87 | | O |
| ATOM | 2837 | CB | GLN A 367 | -1.125 | 31.877 | 78.750 | 1.00 | 32.59 | | C |
| ATOM | 2838 | CG | GLN A 367 | -0.809 | 31.706 | 77.261 | 1.00 | 38.28 | | C |
| ATOM | 2839 | CD | GLN A 367 | -2.041 | 31.620 | 76.374 | 1.00 | 40.78 | | C |

| ATOM | 2840 | OE1 | GLN | A | 367 | -2.994 | 30.902 | 76.676 | 1.00 | 41.30 | O |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2841 | NE2 | GLN | A | 367 | -2.015 | 32.347 | 75.259 | 1.00 | 43.00 | N |
| ATOM | 2842 | N | ASN | A | 368 | -0.588 | 33.816 | 81.121 | 1.00 | 28.25 | N |
| ATOM | 2843 | CA | ASN | A | 368 | -0.335 | 33.954 | 82.557 | 1.00 | 27.61 | C |
| ATOM | 2844 | C | ASN | A | 368 | -0.032 | 35.357 | 83.065 | 1.00 | 25.36 | C |
| ATOM | 2845 | O | ASN | A | 368 | 0.436 | 35.526 | 84.189 | 1.00 | 22.43 | O |
| ATOM | 2846 | CB | ASN | A | 368 | 0.813 | 33.030 | 82.957 | 1.00 | 28.82 | C |
| ATOM | 2847 | CG | ASN | A | 368 | 0.639 | 31.632 | 82.419 | 1.00 | 30.67 | C |
| ATOM | 2848 | OD1 | ASN | A | 368 | 1.443 | 31.161 | 81.616 | 1.00 | 33.84 | O |
| ATOM | 2849 | ND2 | ASN | A | 368 | -0.419 | 30.960 | 82.852 | 1.00 | 32.46 | N |
| ATOM | 2850 | N | GLN | A | 369 | -0.292 | 36.359 | 82.238 | 1.00 | 25.05 | N |
| ATOM | 2851 | CA | GLN | A | 369 | -0.044 | 37.743 | 82.616 | 1.00 | 23.57 | C |
| ATOM | 2852 | C | GLN | A | 369 | 1.340 | 38.001 | 83.241 | 1.00 | 21.30 | C |
| ATOM | 2853 | O | GLN | A | 369 | 2.367 | 37.672 | 82.644 | 1.00 | 21.70 | O |
| ATOM | 2854 | CB | GLN | A | 369 | -1.159 | 38.230 | 83.546 | 1.00 | 24.72 | C |
| ATOM | 2855 | CG | GLN | A | 369 | -2.542 | 38.148 | 82.923 | 1.00 | 26.35 | C |
| ATOM | 2856 | CD | GLN | A | 369 | -3.168 | 36.761 | 83.038 | 1.00 | 29.01 | C |
| ATOM | 2857 | OE1 | GLN | A | 369 | -3.915 | 36.331 | 82.165 | 1.00 | 31.50 | O |
| ATOM | 2858 | NE2 | GLN | A | 369 | -2.878 | 36.070 | 84.127 | 1.00 | 29.01 | N |
| ATOM | 2859 | N | MET | A | 370 | 1.370 | 38.580 | 84.438 | 1.00 | 20.27 | N |
| ATOM | 2860 | CA | MET | A | 370 | 2.636 | 38.915 | 85.090 | 1.00 | 20.21 | C |
| ATOM | 2861 | C | MET | A | 370 | 3.700 | 37.827 | 85.195 | 1.00 | 21.83 | C |
| ATOM | 2862 | O | MET | A | 370 | 4.891 | 38.113 | 85.073 | 1.00 | 20.01 | O |
| ATOM | 2863 | CB | MET | A | 370 | 2.375 | 39.497 | 86.477 | 1.00 | 21.26 | C |
| ATOM | 2864 | CG | MET | A | 370 | 1.626 | 40.821 | 86.452 | 1.00 | 22.10 | C |
| ATOM | 2865 | SD | MET | A | 370 | 2.164 | 41.910 | 85.100 | 1.00 | 23.63 | S |
| ATOM | 2866 | CE | MET | A | 370 | 3.937 | 42.152 | 85.516 | 1.00 | 20.16 | C |
| ATOM | 2867 | N | SER | A | 371 | 3.287 | 36.587 | 85.430 | 1.00 | 23.23 | N |
| ATOM | 2868 | CA | SER | A | 371 | 4.248 | 35.497 | 85.542 | 1.00 | 24.49 | C |
| ATOM | 2869 | C | SER | A | 371 | 5.163 | 35.458 | 84.317 | 1.00 | 24.68 | C |
| ATOM | 2870 | O | SER | A | 371 | 6.381 | 35.261 | 84.439 | 1.00 | 23.68 | O |
| ATOM | 2871 | CB | SER | A | 371 | 3.521 | 34.154 | 85.694 | 1.00 | 24.98 | C |
| ATOM | 2872 | OG | SER | A | 371 | 2.822 | 34.084 | 86.929 | 1.00 | 27.60 | O |
| ATOM | 2873 | N | ALA | A | 372 | 4.580 | 35.654 | 83.139 | 1.00 | 23.66 | N |
| ATOM | 2874 | CA | ALA | A | 372 | 5.360 | 35.636 | 81.906 | 1.00 | 23.58 | C |
| ATOM | 2875 | C | ALA | A | 372 | 6.428 | 36.724 | 81.898 | 1.00 | 23.59 | C |
| ATOM | 2876 | O | ALA | A | 372 | 7.561 | 36.482 | 81.484 | 1.00 | 25.72 | O |
| ATOM | 2877 | CB | ALA | A | 372 | 4.443 | 35.799 | 80.692 | 1.00 | 24.04 | C |
| ATOM | 2878 | N | TYR | A | 373 | 6.079 | 37.922 | 82.353 | 1.00 | 23.42 | N |
| ATOM | 2879 | CA | TYR | A | 373 | 7.054 | 39.002 | 82.346 | 1.00 | 23.12 | C |
| ATOM | 2880 | C | TYR | A | 373 | 8.140 | 38.826 | 83.404 | 1.00 | 22.85 | C |
| ATOM | 2881 | O | TYR | A | 373 | 9.320 | 39.075 | 83.150 | 1.00 | 22.20 | O |
| ATOM | 2882 | CB | TYR | A | 373 | 6.380 | 40.359 | 82.545 | 1.00 | 22.41 | C |
| ATOM | 2883 | CG | TYR | A | 373 | 7.365 | 41.479 | 82.344 | 1.00 | 22.84 | C |
| ATOM | 2884 | CD1 | TYR | A | 373 | 7.813 | 41.810 | 81.061 | 1.00 | 20.96 | C |
| ATOM | 2885 | CD2 | TYR | A | 373 | 7.959 | 42.112 | 83.433 | 1.00 | 21.96 | C |
| ATOM | 2886 | CE1 | TYR | A | 373 | 8.834 | 42.726 | 80.869 | 1.00 | 18.57 | C |
| ATOM | 2887 | CE2 | TYR | A | 373 | 8.986 | 43.034 | 83.252 | 1.00 | 22.39 | C |
| ATOM | 2888 | CZ | TYR | A | 373 | 9.420 | 43.331 | 81.967 | 1.00 | 22.52 | C |
| ATOM | 2889 | OH | TYR | A | 373 | 10.470 | 44.200 | 81.784 | 1.00 | 24.05 | O |
| ATOM | 2890 | N | VAL | A | 374 | 7.737 | 38.399 | 84.593 | 1.00 | 23.76 | N |
| ATOM | 2891 | CA | VAL | A | 374 | 8.682 | 38.201 | 85.677 | 1.00 | 23.21 | C |
| ATOM | 2892 | C | VAL | A | 374 | 9.770 | 37.228 | 85.237 | 1.00 | 24.03 | C |
| ATOM | 2893 | O | VAL | A | 374 | 10.926 | 37.354 | 85.643 | 1.00 | 22.40 | O |
| ATOM | 2894 | CB | VAL | A | 374 | 7.961 | 37.686 | 86.933 | 1.00 | 24.64 | C |
| ATOM | 2895 | CG1 | VAL | A | 374 | 8.969 | 37.404 | 88.043 | 1.00 | 24.28 | C |
| ATOM | 2896 | CG2 | VAL | A | 374 | 6.939 | 38.733 | 87.397 | 1.00 | 20.04 | C |
| ATOM | 2897 | N | GLU | A | 375 | 9.407 | 36.265 | 84.394 | 1.00 | 24.82 | N |
| ATOM | 2898 | CA | GLU | A | 375 | 10.388 | 35.308 | 83.895 | 1.00 | 27.16 | C |
| ATOM | 2899 | C | GLU | A | 375 | 11.465 | 36.040 | 83.102 | 1.00 | 26.31 | C |
| ATOM | 2900 | O | GLU | A | 375 | 12.650 | 35.728 | 83.206 | 1.00 | 26.42 | O |
| ATOM | 2901 | CB | GLU | A | 375 | 9.718 | 34.259 | 83.006 | 1.00 | 30.40 | C |
| ATOM | 2902 | CG | GLU | A | 375 | 9.103 | 33.119 | 83.787 | 1.00 | 35.83 | C |
| ATOM | 2903 | CD | GLU | A | 375 | 8.517 | 32.048 | 82.897 | 1.00 | 38.22 | C |
| ATOM | 2904 | OE1 | GLU | A | 375 | 9.177 | 31.690 | 81.900 | 1.00 | 41.12 | O |
| ATOM | 2905 | OE2 | GLU | A | 375 | 7.406 | 31.557 | 83.202 | 1.00 | 40.00 | O |
| ATOM | 2906 | N | LEU | A | 376 | 11.044 | 37.017 | 82.304 | 1.00 | 25.65 | N |
| ATOM | 2907 | CA | LEU | A | 376 | 11.987 | 37.792 | 81.512 | 1.00 | 23.75 | C |
| ATOM | 2908 | C | LEU | A | 376 | 12.872 | 38.595 | 82.458 | 1.00 | 22.75 | C |
| ATOM | 2909 | O | LEU | A | 376 | 14.095 | 38.581 | 82.335 | 1.00 | 23.04 | O |
| ATOM | 2910 | CB | LEU | A | 376 | 11.242 | 38.742 | 80.552 | 1.00 | 22.44 | C |
| ATOM | 2911 | CG | LEU | A | 376 | 12.097 | 39.782 | 79.807 | 1.00 | 20.41 | C |
| ATOM | 2912 | CD1 | LEU | A | 376 | 13.171 | 39.071 | 78.977 | 1.00 | 19.17 | C |
| ATOM | 2913 | CD2 | LEU | A | 376 | 11.219 | 40.648 | 78.912 | 1.00 | 19.49 | C |
| ATOM | 2914 | N | GLN | A | 377 | 12.255 | 39.291 | 83.407 | 1.00 | 20.79 | N |
| ATOM | 2915 | CA | GLN | A | 377 | 13.028 | 40.091 | 84.347 | 1.00 | 22.61 | C |
| ATOM | 2916 | C | GLN | A | 377 | 14.111 | 39.264 | 85.036 | 1.00 | 23.28 | C |
| ATOM | 2917 | O | GLN | A | 377 | 15.253 | 39.704 | 85.155 | 1.00 | 23.12 | O |
| ATOM | 2918 | CB | GLN | A | 377 | 12.120 | 40.724 | 85.401 | 1.00 | 20.50 | C |
| ATOM | 2919 | CG | GLN | A | 377 | 12.821 | 41.810 | 86.200 | 1.00 | 22.81 | C |

| ATOM | 2920 | CD | GLN | A | 377 | 11.893 | 42.580 | 87.120 | 1.00 | 21.95 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 2921 | OE1 | GLN | A | 377 | 11.871 | 43.807 | 87.102 | 1.00 | 25.02 | O |
| ATOM | 2922 | NE2 | GLN | A | 377 | 11.132 | 41.864 | 87.938 | 1.00 | 22.93 | N |
| ATOM | 2923 | N | GLU | A | 378 | 13.756 | 38.066 | 85.487 | 1.00 | 23.62 | N |
| ATOM | 2924 | CA | GLU | A | 378 | 14.718 | 37.203 | 86.163 | 1.00 | 25.12 | C |
| ATOM | 2925 | C | GLU | A | 378 | 15.838 | 36.760 | 85.226 | 1.00 | 25.64 | C |
| ATOM | 2926 | O | GLU | A | 378 | 16.980 | 36.584 | 85.663 | 1.00 | 24.29 | O |
| ATOM | 2927 | CB | GLU | A | 378 | 14.012 | 35.985 | 86.761 | 1.00 | 27.08 | C |
| ATOM | 2928 | CG | GLU | A | 378 | 13.148 | 36.312 | 87.969 | 1.00 | 30.49 | C |
| ATOM | 2929 | CD | GLU | A | 378 | 13.955 | 36.877 | 89.130 | 1.00 | 33.17 | C |
| ATOM | 2930 | OE1 | GLU | A | 378 | 14.949 | 36.234 | 89.530 | 1.00 | 34.35 | O |
| ATOM | 2931 | OE2 | GLU | A | 378 | 13.600 | 37.958 | 89.644 | 1.00 | 34.03 | O |
| ATOM | 2932 | N | ARG | A | 379 | 15.522 | 36.564 | 83.945 | 1.00 | 24.45 | N |
| ATOM | 2933 | CA | ARG | A | 379 | 16.564 | 36.187 | 83.002 | 1.00 | 25.04 | C |
| ATOM | 2934 | C | ARG | A | 379 | 17.498 | 37.384 | 82.871 | 1.00 | 24.40 | C |
| ATOM | 2935 | O | ARG | A | 379 | 18.706 | 37.221 | 82.731 | 1.00 | 26.59 | O |
| ATOM | 2936 | CB | ARG | A | 379 | 15.983 | 35.803 | 81.635 | 1.00 | 25.69 | C |
| ATOM | 2937 | CG | ARG | A | 379 | 15.263 | 34.456 | 81.646 | 1.00 | 30.45 | C |
| ATOM | 2938 | CD | ARG | A | 379 | 15.258 | 33.781 | 80.281 | 1.00 | 30.56 | C |
| ATOM | 2939 | NE | ARG | A | 379 | 14.402 | 34.466 | 79.321 | 1.00 | 35.79 | N |
| ATOM | 2940 | CZ | ARG | A | 379 | 13.074 | 34.444 | 79.351 | 1.00 | 37.63 | C |
| ATOM | 2941 | NH1 | ARG | A | 379 | 12.435 | 33.765 | 80.298 | 1.00 | 40.23 | N |
| ATOM | 2942 | NH2 | ARG | A | 379 | 12.382 | 35.104 | 78.433 | 1.00 | 36.09 | N |
| ATOM | 2943 | N | GLU | A | 380 | 16.936 | 38.587 | 82.943 | 1.00 | 22.83 | N |
| ATOM | 2944 | CA | GLU | A | 380 | 17.737 | 39.805 | 82.854 | 1.00 | 23.98 | C |
| ATOM | 2945 | C | GLU | A | 380 | 18.661 | 39.944 | 84.063 | 1.00 | 23.96 | C |
| ATOM | 2946 | O | GLU | A | 380 | 19.857 | 40.213 | 83.915 | 1.00 | 23.36 | O |
| ATOM | 2947 | CB | GLU | A | 380 | 16.838 | 41.036 | 82.753 | 1.00 | 23.87 | C |
| ATOM | 2948 | CG | GLU | A | 380 | 16.253 | 41.271 | 81.366 | 1.00 | 24.69 | C |
| ATOM | 2949 | CD | GLU | A | 380 | 15.354 | 42.495 | 81.325 | 1.00 | 26.05 | C |
| ATOM | 2950 | OE1 | GLU | A | 380 | 14.255 | 42.438 | 81.915 | 1.00 | 27.07 | O |
| ATOM | 2951 | OE2 | GLU | A | 380 | 15.752 | 43.515 | 80.720 | 1.00 | 24.42 | O |
| ATOM | 2952 | N | PHE | A | 381 | 18.105 | 39.773 | 85.258 | 1.00 | 24.58 | N |
| ATOM | 2953 | CA | PHE | A | 381 | 18.907 | 39.859 | 86.474 | 1.00 | 25.59 | C |
| ATOM | 2954 | C | PHE | A | 381 | 20.050 | 38.848 | 96.400 | 1.00 | 25.38 | C |
| ATOM | 2955 | O | PHE | A | 381 | 21.194 | 39.162 | 86.725 | 1.00 | 23.26 | O |
| ATOM | 2956 | CB | PHE | A | 381 | 18.059 | 39.555 | 87.712 | 1.00 | 25.81 | C |
| ATOM | 2957 | CG | PHE | A | 381 | 17.187 | 40.692 | 88.151 | 1.00 | 27.05 | C |
| ATOM | 2958 | CD1 | PHE | A | 381 | 17.705 | 41.978 | 88.274 | 1.00 | 27.92 | C |
| ATOM | 2959 | CD2 | PHE | A | 381 | 15.855 | 40.471 | 88.488 | 1.00 | 27.66 | C |
| ATOM | 2960 | CE1 | PHE | A | 381 | 16.910 | 43.025 | 88.730 | 1.00 | 27.92 | C |
| ATOM | 2961 | CE2 | PHE | A | 381 | 15.052 | 41.510 | 88.945 | 1.00 | 26.69 | C |
| ATOM | 2962 | CZ | PHE | A | 381 | 15.579 | 42.791 | 89.067 | 1.00 | 26.91 | C |
| ATOM | 2963 | N | ALA | A | 382 | 19.726 | 37.635 | 85.960 | 1.00 | 25.67 | N |
| ATOM | 2964 | CA | ALA | A | 382 | 20.717 | 36.578 | 85.850 | 1.00 | 26.46 | C |
| ATOM | 2965 | C | ALA | A | 382 | 21.786 | 36.895 | 84.819 | 1.00 | 27.27 | C |
| ATOM | 2966 | O | ALA | A | 382 | 22.946 | 36.554 | 85.007 | 1.00 | 27.63 | O |
| ATOM | 2967 | CB | ALA | A | 382 | 20.037 | 35.259 | 85.506 | 1.00 | 27.53 | C |
| ATOM | 2968 | N | ALA | A | 383 | 21.394 | 37.556 | 83.736 | 1.00 | 27.83 | N |
| ATOM | 2969 | CA | ALA | A | 383 | 22.328 | 37.899 | 82.671 | 1.00 | 27.29 | C |
| ATOM | 2970 | C | ALA | A | 383 | 23.355 | 38.960 | 83.074 | 1.00 | 29.30 | C |
| ATOM | 2971 | O | ALA | A | 383 | 24.345 | 39.178 | 82.365 | 1.00 | 28.47 | O |
| ATOM | 2972 | CB | ALA | A | 383 | 21.557 | 38.363 | 81.445 | 1.00 | 27.94 | C |
| ATOM | 2973 | N | GLU | A | 384 | 23.126 | 39.618 | 84.206 | 1.00 | 29.35 | N |
| ATOM | 2974 | CA | GLU | A | 384 | 24.038 | 40.654 | 84.668 | 1.00 | 30.98 | C |
| ATOM | 2975 | C | GLU | A | 384 | 25.452 | 40.130 | 84.909 | 1.00 | 31.66 | C |
| ATOM | 2976 | O | GLU | A | 384 | 26.431 | 40.855 | 84.722 | 1.00 | 30.73 | O |
| ATOM | 2977 | CB | GLU | A | 384 | 23.497 | 41.295 | 85.945 | 1.00 | 32.61 | C |
| ATOM | 2978 | CG | GLU | A | 384 | 22.122 | 41.907 | 85.777 | 1.00 | 35.53 | C |
| ATOM | 2979 | CD | GLU | A | 384 | 21.664 | 42.630 | 87.018 | 1.00 | 36.50 | C |
| ATOM | 2980 | OE1 | GLU | A | 384 | 21.850 | 42.068 | 88.117 | 1.00 | 40.07 | O |
| ATOM | 2981 | OE2 | GLU | A | 384 | 21.116 | 43.748 | 86.900 | 1.00 | 37.65 | O |
| ATOM | 2982 | N | GLU | A | 385 | 25.565 | 38.872 | 85.320 | 1.00 | 32.28 | N |
| ATOM | 2983 | CA | GLU | A | 385 | 26.878 | 38.300 | 85.563 | 1.00 | 34.67 | C |
| ATOM | 2984 | C | GLU | A | 385 | 27.625 | 38.143 | 84.240 | 1.00 | 33.80 | C |
| ATOM | 2985 | O | GLU | A | 385 | 28.845 | 37.964 | 84.226 | 1.00 | 31.82 | O |
| ATOM | 2986 | CB | GLU | A | 385 | 26.756 | 36.952 | 86.282 | 1.00 | 38.06 | C |
| ATOM | 2987 | CG | GLU | A | 385 | 25.981 | 35.901 | 85.525 | 1.00 | 45.94 | C |
| ATOM | 2988 | CD | GLU | A | 385 | 25.823 | 34.619 | 86.321 | 1.00 | 51.23 | C |
| ATOM | 2989 | OE1 | GLU | A | 385 | 26.856 | 34.004 | 86.672 | 1.00 | 52.69 | O |
| ATOM | 2990 | OE2 | GLU | A | 385 | 24.666 | 34.228 | 86.600 | 1.00 | 53.91 | O |
| ATOM | 2991 | N | ARG | A | 386 | 26.888 | 38.218 | 83.131 | 1.00 | 32.89 | N |
| ATOM | 2992 | CA | ARG | A | 386 | 27.487 | 38.116 | 81.799 | 1.00 | 32.24 | C |
| ATOM | 2993 | C | ARG | A | 386 | 27.812 | 39.515 | 81.286 | 1.00 | 30.88 | C |
| ATOM | 2994 | O | ARG | A | 386 | 28.397 | 39.672 | 80.215 | 1.00 | 31.02 | O |
| ATOM | 2995 | CB | ARG | A | 386 | 26.538 | 37.430 | 80.810 | 1.00 | 33.37 | C |
| ATOM | 2996 | CG | ARG | A | 386 | 26.479 | 35.913 | 80.922 | 1.00 | 36.19 | C |
| ATOM | 2997 | CD | ARG | A | 386 | 25.675 | 35.305 | 79.767 | 1.00 | 37.84 | C |
| ATOM | 2998 | NE | ARG | A | 386 | 24.244 | 35.596 | 79.866 | 1.00 | 39.80 | N |
| ATOM | 2999 | CZ | ARG | A | 386 | 23.370 | 35.424 | 78.877 | 1.00 | 39.45 | C |

| ATOM | 3000 | NH1 | ARG | A | 386 | 23.776 | 34.965 | 77.702 | 1.00 | 41.63 | N |
| ATOM | 3001 | NH2 | ARG | A | 386 | 22.085 | 35.710 | 79.061 | 1.00 | 37.09 | N |
| ATOM | 3002 | N | GLY | A | 387 | 27.414 | 40.528 | 82.051 | 1.00 | 29.63 | N |
| ATOM | 3003 | CA | GLY | A | 387 | 27.683 | 41.902 | 81.661 | 1.00 | 28.19 | C |
| ATOM | 3004 | C | GLY | A | 387 | 26.465 | 42.724 | 81.274 | 1.00 | 26.05 | C |
| ATOM | 3005 | O | GLY | A | 387 | 26.589 | 43.910 | 80.986 | 1.00 | 24.82 | O |
| ATOM | 3006 | N | TYR | A | 388 | 25.291 | 42.100 | 81.267 | 1.00 | 25.50 | N |
| ATOM | 3007 | CA | TYR | A | 388 | 24.059 | 42.792 | 80.915 | 1.00 | 25.17 | C |
| ATOM | 3008 | C | TYR | A | 388 | 23.790 | 43.902 | 81.921 | 1.00 | 25.90 | C |
| ATOM | 3009 | O | TYR | A | 388 | 23.903 | 43.681 | 83.125 | 1.00 | 28.16 | O |
| ATOM | 3010 | CB | TYR | A | 388 | 22.889 | 41.814 | 80.922 | 1.00 | 24.06 | C |
| ATOM | 3011 | CG | TYR | A | 388 | 21.585 | 42.415 | 80.441 | 1.00 | 22.57 | C |
| ATOM | 3012 | CD1 | TYR | A | 388 | 21.433 | 42.832 | 79.117 | 1.00 | 21.75 | C |
| ATOM | 3013 | CD2 | TYR | A | 388 | 20.493 | 42.527 | 81.297 | 1.00 | 21.15 | C |
| ATOM | 3014 | CE1 | TYR | A | 388 | 20.223 | 43.336 | 78.654 | 1.00 | 19.92 | C |
| ATOM | 3015 | CE2 | TYR | A | 388 | 19.282 | 43.029 | 80.852 | 1.00 | 21.40 | C |
| ATOM | 3016 | CZ | TYR | A | 388 | 19.151 | 43.428 | 79.526 | 1.00 | 22.03 | C |
| ATOM | 3017 | OH | TYR | A | 388 | 17.941 | 43.883 | 79.078 | 1.00 | 17.57 | O |
| ATOM | 3018 | N | THR | A | 389 | 23.425 | 45.084 | 81.433 | 1.00 | 24.43 | N |
| ATOM | 3019 | CA | THR | A | 389 | 23.149 | 46.215 | 82.317 | 1.00 | 23.99 | C |
| ATOM | 3020 | C | THR | A | 389 | 21.774 | 46.862 | 82.144 | 1.00 | 23.34 | C |
| ATOM | 3021 | O | THR | A | 389 | 21.364 | 47.667 | 82.977 | 1.00 | 24.46 | O |
| ATOM | 3022 | CB | THR | A | 389 | 24.206 | 47.324 | 82.138 | 1.00 | 24.58 | C |
| ATOM | 3023 | OG1 | THR | A | 389 | 24.145 | 47.838 | 80.801 | 1.00 | 22.97 | O |
| ATOM | 3024 | CG2 | THR | A | 389 | 25.603 | 46.771 | 82.393 | 1.00 | 25.50 | C |
| ATOM | 3025 | N | ALA | A | 390 | 21.057 | 46.508 | 81.082 | 1.00 | 22.58 | N |
| ATOM | 3026 | CA | ALA | A | 390 | 19.748 | 47.113 | 80.814 | 1.00 | 22.69 | C |
| ATOM | 3027 | C | ALA | A | 390 | 18.650 | 46.833 | 81.830 | 1.00 | 21.58 | C |
| ATOM | 3028 | O | ALA | A | 390 | 17.590 | 47.453 | 81.773 | 1.00 | 21.71 | O |
| ATOM | 3029 | CB | ALA | A | 390 | 19.270 | 46.728 | 79.419 | 1.00 | 22.62 | C |
| ATOM | 3030 | N | THR | A | 391 | 18.886 | 45.913 | 82.761 | 1.00 | 22.10 | N |
| ATOM | 3031 | CA | THR | A | 391 | 17.871 | 45.616 | 83.775 | 1.00 | 22.57 | C |
| ATOM | 3032 | C | THR | A | 391 | 17.506 | 46.933 | 84.461 | 1.00 | 22.96 | C |
| ATOM | 3033 | O | THR | A | 391 | 16.337 | 47.207 | 84.739 | 1.00 | 23.67 | O |
| ATOM | 3034 | CB | THR | A | 391 | 18.392 | 44.627 | 84.842 | 1.00 | 24.60 | C |
| ATOM | 3035 | OG1 | THR | A | 391 | 19.103 | 43.558 | 84.207 | 1.00 | 21.82 | O |
| ATOM | 3036 | CG2 | THR | A | 391 | 17.225 | 44.041 | 85.624 | 1.00 | 24.55 | C |
| ATOM | 3037 | N | LYS | A | 392 | 18.523 | 47.741 | 84.738 | 1.00 | 22.96 | N |
| ATOM | 3038 | CA | LYS | A | 392 | 18.329 | 49.053 | 85.351 | 1.00 | 23.26 | C |
| ATOM | 3039 | C | LYS | A | 392 | 18.139 | 49.996 | 84.170 | 1.00 | 22.33 | C |
| ATOM | 3040 | O | LYS | A | 392 | 19.074 | 50.683 | 83.741 | 1.00 | 20.73 | O |
| ATOM | 3041 | CB | LYS | A | 392 | 19.567 | 49.445 | 86.144 | 1.00 | 23.48 | C |
| ATOM | 3042 | CG | LYS | A | 392 | 19.888 | 48.485 | 87.269 | 1.00 | 29.88 | C |
| ATOM | 3043 | CD | LYS | A | 392 | 21.350 | 48.589 | 87.663 | 1.00 | 31.17 | C |
| ATOM | 3044 | CE | LYS | A | 392 | 21.536 | 48.905 | 89.128 | 1.00 | 33.01 | C |
| ATOM | 3045 | NZ | LYS | A | 392 | 21.188 | 50.317 | 89.464 | 1.00 | 36.09 | N |
| ATOM | 3046 | N | HIS | A | 393 | 16.922 | 50.008 | 83.640 | 1.00 | 21.74 | N |
| ATOM | 3047 | CA | HIS | A | 393 | 16.607 | 50.817 | 82.471 | 1.00 | 21.77 | C |
| ATOM | 3048 | C | HIS | A | 393 | 16.851 | 52.323 | 82.557 | 1.00 | 20.34 | C |
| ATOM | 3049 | O | HIS | A | 393 | 17.228 | 52.936 | 81.560 | 1.00 | 22.01 | O |
| ATOM | 3050 | CB | HIS | A | 393 | 15.162 | 50.546 | 82.019 | 1.00 | 21.66 | C |
| ATOM | 3051 | CG | HIS | A | 393 | 14.149 | 50.598 | 83.121 | 1.00 | 21.38 | C |
| ATOM | 3052 | ND1 | HIS | A | 393 | 13.457 | 49.483 | 83.546 | 1.00 | 21.75 | N |
| ATOM | 3053 | CD2 | HIS | A | 393 | 13.680 | 51.635 | 83.859 | 1.00 | 20.86 | C |
| ATOM | 3054 | CE1 | HIS | A | 393 | 12.603 | 49.831 | 84.494 | 1.00 | 20.21 | C |
| ATOM | 3055 | NE2 | HIS | A | 393 | 12.718 | 51.131 | 84.702 | 1.00 | 19.62 | N |
| ATOM | 3056 | N | GLN | A | 394 | 16.662 | 52.914 | 83.733 | 1.00 | 19.10 | N |
| ATOM | 3057 | CA | GLN | A | 394 | 16.844 | 54.359 | 83.894 | 1.00 | 19.63 | C |
| ATOM | 3058 | C | GLN | A | 394 | 18.257 | 54.831 | 83.545 | 1.00 | 19.29 | C |
| ATOM | 3059 | O | GLN | A | 394 | 18.434 | 55.688 | 82.682 | 1.00 | 19.61 | O |
| ATOM | 3060 | CB | GLN | A | 394 | 16.488 | 54.778 | 85.321 | 1.00 | 19.17 | C |
| ATOM | 3061 | CG | GLN | A | 394 | 15.156 | 54.231 | 85.797 | 1.00 | 21.24 | C |
| ATOM | 3062 | CD | GLN | A | 394 | 13.951 | 54.869 | 85.115 | 1.00 | 21.40 | C |
| ATOM | 3063 | OE1 | GLN | A | 394 | 13.999 | 55.249 | 83.945 | 1.00 | 20.77 | O |
| ATOM | 3064 | NE2 | GLN | A | 394 | 12.851 | 54.964 | 85.849 | 1.00 | 21.57 | N |
| ATOM | 3065 | N | ARG | A | 395 | 19.261 | 54.281 | 84.215 | 1.00 | 18.06 | N |
| ATOM | 3066 | CA | ARG | A | 395 | 20.641 | 54.662 | 83.940 | 1.00 | 18.73 | C |
| ATOM | 3067 | C | ARG | A | 395 | 21.044 | 54.235 | 82.532 | 1.00 | 18.07 | C |
| ATOM | 3068 | O | ARG | A | 395 | 21.801 | 54.928 | 81.857 | 1.00 | 18.33 | O |
| ATOM | 3069 | CB | ARG | A | 395 | 21.592 | 54.015 | 84.958 | 1.00 | 20.53 | C |
| ATOM | 3070 | CG | ARG | A | 395 | 21.423 | 52.510 | 85.081 | 1.00 | 21.56 | C |
| ATOM | 3071 | CD | ARG | A | 395 | 22.725 | 51.841 | 85.468 | 1.00 | 22.88 | C |
| ATOM | 3072 | NE | ARG | A | 395 | 23.732 | 51.957 | 84.414 | 1.00 | 23.09 | N |
| ATOM | 3073 | CZ | ARG | A | 395 | 23.612 | 51.436 | 83.193 | 1.00 | 22.82 | C |
| ATOM | 3074 | NH1 | ARG | A | 395 | 22.521 | 50.755 | 82.854 | 1.00 | 21.19 | N |
| ATOM | 3075 | NH2 | ARG | A | 395 | 24.590 | 51.586 | 82.312 | 1.00 | 19.48 | N |
| ATOM | 3076 | N | GLU | A | 396 | 20.528 | 53.087 | 82.101 | 1.00 | 17.78 | N |
| ATOM | 3077 | CA | GLU | A | 396 | 20.817 | 52.533 | 80.783 | 1.00 | 17.57 | C |
| ATOM | 3078 | C | GLU | A | 396 | 20.467 | 53.521 | 79.682 | 1.00 | 18.41 | C |
| ATOM | 3079 | O | GLU | A | 396 | 21.115 | 53.566 | 78.636 | 1.00 | 18.49 | O |

| ATOM | 3080 | CB | GLU | A | 396 | 20.002 | 51.253 | 80.576 | 1.00 | 19.14 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 3081 | CG | GLU | A | 396 | 20.236 | 50.526 | 79.250 | 1.00 | 20.66 | C |
| ATOM | 3082 | CD | GLU | A | 396 | 21.610 | 49.869 | 79.161 | 1.00 | 21.94 | C |
| ATOM | 3083 | OE1 | GLU | A | 396 | 22.199 | 49.567 | 80.221 | 1.00 | 20.26 | O |
| ATOM | 3084 | OE2 | GLU | A | 396 | 22.096 | 49.639 | 78.030 | 1.00 | 21.47 | O |
| ATOM | 3085 | N | VAL | A | 397 | 19.441 | 54.319 | 79.935 | 1.00 | 17.19 | N |
| ATOM | 3086 | CA | VAL | A | 397 | 18.964 | 55.270 | 78.958 | 1.00 | 18.51 | C |
| ATOM | 3087 | C | VAL | A | 397 | 19.455 | 56.703 | 79.208 | 1.00 | 18.87 | C |
| ATOM | 3088 | O | VAL | A | 397 | 19.033 | 57.643 | 78.528 | 1.00 | 17.52 | O |
| ATOM | 3089 | CB | VAL | A | 397 | 17.414 | 55.196 | 78.904 | 1.00 | 19.83 | C |
| ATOM | 3090 | CG1 | VAL | A | 397 | 16.800 | 56.063 | 79.977 | 1.00 | 19.34 | C |
| ATOM | 3091 | CG2 | VAL | A | 397 | 16.930 | 55.561 | 77.547 | 1.00 | 25.17 | C |
| ATOM | 3092 | N | GLY | A | 398 | 20.342 | 56.862 | 80.191 | 1.00 | 17.90 | N |
| ATOM | 3093 | CA | GLY | A | 398 | 20.904 | 58.170 | 80.474 | 1.00 | 17.06 | C |
| ATOM | 3094 | C | GLY | A | 398 | 20.393 | 58.996 | 81.639 | 1.00 | 17.02 | C |
| ATOM | 3095 | O | GLY | A | 398 | 20.803 | 60.143 | 81.774 | 1.00 | 17.55 | O |
| ATOM | 3096 | N | ALA | A | 399 | 19.523 | 58.449 | 82.484 | 1.00 | 17.50 | N |
| ATOM | 3097 | CA | ALA | A | 399 | 19.010 | 59.221 | 83.615 | 1.00 | 18.89 | C |
| ATOM | 3098 | C | ALA | A | 399 | 20.155 | 59.768 | 84.475 | 1.00 | 20.27 | C |
| ATOM | 3099 | O | ALA | A | 399 | 20.086 | 60.891 | 84.985 | 1.00 | 19.59 | O |
| ATOM | 3100 | CB | ALA | A | 399 | 18.079 | 58.368 | 84.464 | 1.00 | 17.77 | C |
| ATOM | 3101 | N | GLY | A | 400 | 21.210 | 58.978 | 84.634 | 1.00 | 20.39 | N |
| ATOM | 3102 | CA | GLY | A | 400 | 22.340 | 59.438 | 85.425 | 1.00 | 20.11 | C |
| ATOM | 3103 | C | GLY | A | 400 | 23.094 | 60.547 | 84.707 | 1.00 | 19.61 | C |
| ATOM | 3104 | O | GLY | A | 400 | 23.529 | 61.512 | 85.321 | 1.00 | 20.13 | O |
| ATOM | 3105 | N | TYR | A | 401 | 23.239 | 60.416 | 83.394 | 1.00 | 19.91 | N |
| ATOM | 3106 | CA | TYR | A | 401 | 23.951 | 61.405 | 82.602 | 1.00 | 18.58 | C |
| ATOM | 3107 | C | TYR | A | 401 | 23.257 | 62.770 | 82.647 | 1.00 | 20.02 | C |
| ATOM | 3108 | O | TYR | A | 401 | 23.900 | 63.783 | 82.908 | 1.00 | 20.01 | O |
| ATOM | 3109 | CB | TYR | A | 401 | 24.075 | 60.914 | 81.157 | 1.00 | 19.97 | C |
| ATOM | 3110 | CG | TYR | A | 401 | 24.837 | 61.847 | 80.246 | 1.00 | 19.66 | C |
| ATOM | 3111 | CD1 | TYR | A | 401 | 26.219 | 62.000 | 80.368 | 1.00 | 19.87 | C |
| ATOM | 3112 | CD2 | TYR | A | 401 | 24.172 | 62.605 | 79.281 | 1.00 | 19.72 | C |
| ATOM | 3113 | CE1 | TYR | A | 401 | 26.922 | 62.886 | 79.550 | 1.00 | 17.56 | C |
| ATOM | 3114 | CE2 | TYR | A | 401 | 24.868 | 63.501 | 78.460 | 1.00 | 18.96 | C |
| ATOM | 3115 | CZ | TYR | A | 401 | 26.242 | 63.630 | 78.602 | 1.00 | 18.93 | C |
| ATOM | 3116 | OH | TYR | A | 401 | 26.935 | 64.491 | 77.785 | 1.00 | 19.21 | O |
| ATOM | 3117 | N | PHE | A | 402 | 21.949 | 62.808 | 82.396 | 1.00 | 19.27 | N |
| ATOM | 3118 | CA | PHE | A | 402 | 21.244 | 64.079 | 82.432 | 1.00 | 18.36 | C |
| ATOM | 3119 | C | PHE | A | 402 | 21.186 | 64.661 | 83.832 | 1.00 | 18.61 | C |
| ATOM | 3120 | O | PHE | A | 402 | 21.010 | 65.871 | 83.993 | 1.00 | 19.42 | O |
| ATOM | 3121 | CB | PHE | A | 402 | 19.839 | 63.952 | 81.823 | 1.00 | 17.47 | C |
| ATOM | 3122 | CG | PHE | A | 402 | 19.853 | 63.902 | 80.314 | 1.00 | 17.97 | C |
| ATOM | 3123 | CD1 | PHE | A | 402 | 20.110 | 62.709 | 79.641 | 1.00 | 14.64 | C |
| ATOM | 3124 | CD2 | PHE | A | 402 | 19.717 | 65.069 | 79.570 | 1.00 | 16.19 | C |
| ATOM | 3125 | CE1 | PHE | A | 402 | 20.237 | 62.688 | 78.255 | 1.00 | 14.92 | C |
| ATOM | 3126 | CE2 | PHE | A | 402 | 19.845 | 65.057 | 78.179 | 1.00 | 15.95 | C |
| ATOM | 3127 | CZ | PHE | A | 402 | 20.107 | 63.865 | 77.521 | 1.00 | 13.61 | C |
| ATOM | 3128 | N | ASP | A | 403 | 21.335 | 63.817 | 84.850 | 1.00 | 18.67 | N |
| ATOM | 3129 | CA | ASP | A | 403 | 21.341 | 64.332 | 86.215 | 1.00 | 21.33 | C |
| ATOM | 3130 | C | ASP | A | 403 | 22.637 | 65.116 | 86.376 | 1.00 | 22.06 | C |
| ATOM | 3131 | O | ASP | A | 403 | 22.666 | 66.185 | 86.982 | 1.00 | 21.54 | O |
| ATOM | 3132 | CB | ASP | A | 403 | 21.286 | 63.204 | 87.249 | 1.00 | 23.15 | C |
| ATOM | 3133 | CG | ASP | A | 403 | 19.864 | 62.867 | 87.666 | 1.00 | 27.04 | C |
| ATOM | 3134 | OD1 | ASP | A | 403 | 18.959 | 63.677 | 87.380 | 1.00 | 27.61 | O |
| ATOM | 3135 | OD2 | ASP | A | 403 | 19.647 | 61.803 | 88.287 | 1.00 | 29.62 | O |
| ATOM | 3136 | N | ARG | A | 404 | 23.708 | 64.577 | 85.805 | 1.00 | 22.87 | N |
| ATOM | 3137 | CA | ARG | A | 404 | 25.008 | 65.216 | 85.863 | 1.00 | 22.61 | C |
| ATOM | 3138 | C | ARG | A | 404 | 24.914 | 66.573 | 85.169 | 1.00 | 22.71 | C |
| ATOM | 3139 | O | ARG | A | 404 | 25.441 | 67.576 | 85.658 | 1.00 | 21.46 | O |
| ATOM | 3140 | CB | ARG | A | 404 | 26.048 | 64.335 | 85.175 | 1.00 | 25.04 | C |
| ATOM | 3141 | CG | ARG | A | 404 | 27.466 | 64.830 | 85.319 | 1.00 | 28.87 | C |
| ATOM | 3142 | CD | ARG | A | 404 | 27.842 | 64.975 | 86.788 | 1.00 | 35.82 | C |
| ATOM | 3143 | NE | ARG | A | 404 | 29.223 | 65.432 | 86.945 | 1.00 | 41.00 | N |
| ATOM | 3144 | CZ | ARG | A | 404 | 30.293 | 64.653 | 86.822 | 1.00 | 41.08 | C |
| ATOM | 3145 | NH1 | ARG | A | 404 | 30.154 | 63.363 | 86.548 | 1.00 | 40.82 | N |
| ATOM | 3146 | NH2 | ARG | A | 404 | 31.505 | 65.174 | 86.956 | 1.00 | 43.23 | N |
| ATOM | 3147 | N | ILE | A | 405 | 24.238 | 66.608 | 84.025 | 1.00 | 20.28 | N |
| ATOM | 3148 | CA | ILE | A | 405 | 24.070 | 67.866 | 83.314 | 1.00 | 18.30 | C |
| ATOM | 3149 | C | ILE | A | 405 | 23.319 | 68.858 | 84.201 | 1.00 | 18.55 | C |
| ATOM | 3150 | O | ILE | A | 405 | 23.721 | 70.011 | 84.337 | 1.00 | 17.31 | O |
| ATOM | 3151 | CB | ILE | A | 405 | 23.266 | 67.683 | 82.005 | 1.00 | 17.07 | C |
| ATOM | 3152 | CG1 | ILE | A | 405 | 24.090 | 66.878 | 80.995 | 1.00 | 15.05 | C |
| ATOM | 3153 | CG2 | ILE | A | 405 | 22.884 | 69.056 | 81.420 | 1.00 | 14.42 | C |
| ATOM | 3154 | CD1 | ILE | A | 405 | 23.405 | 66.725 | 79.640 | 1.00 | 14.92 | C |
| ATOM | 3155 | N | ALA | A | 406 | 22.230 | 68.394 | 84.809 | 1.00 | 18.96 | N |
| ATOM | 3156 | CA | ALA | A | 406 | 21.410 | 69.241 | 85.662 | 1.00 | 18.90 | C |
| ATOM | 3157 | C | ALA | A | 406 | 22.174 | 69.804 | 86.854 | 1.00 | 19.85 | C |
| ATOM | 3158 | O | ALA | A | 406 | 22.086 | 70.994 | 87.141 | 1.00 | 20.82 | O |
| ATOM | 3159 | CB | ALA | A | 406 | 20.175 | 68.469 | 86.141 | 1.00 | 18.39 | C |

| ATOM | 3160 | N   | THR A 407 | 22.926 | 68.963 | 87.550 | 1.00 21.73 | N |
| ATOM | 3161 | CA  | THR A 407 | 23.680 | 69.440 | 88.704 | 1.00 23.66 | C |
| ATOM | 3162 | C   | THR A 407 | 24.872 | 70.285 | 88.276 | 1.00 24.70 | C |
| ATOM | 3163 | O   | THR A 407 | 25.482 | 70.975 | 89.096 | 1.00 25.41 | O |
| ATOM | 3164 | CB  | THR A 407 | 24.162 | 68.283 | 89.590 | 1.00 23.67 | C |
| ATOM | 3165 | OG1 | THR A 407 | 25.033 | 67.430 | 88.839 | 1.00 25.64 | O |
| ATOM | 3166 | CG2 | THR A 407 | 22.970 | 67.483 | 90.102 | 1.00 22.90 | C |
| ATOM | 3167 | N   | THR A 408 | 25.212 | 70.227 | 86.990 | 1.00 24.94 | N |
| ATOM | 3168 | CA  | THR A 408 | 26.308 | 71.039 | 86.474 | 1.00 22.90 | C |
| ATOM | 3169 | C   | THR A 408 | 25.707 | 72.430 | 86.248 | 1.00 23.54 | C |
| ATOM | 3170 | O   | THR A 408 | 26.317 | 73.446 | 86.568 | 1.00 24.90 | O |
| ATOM | 3171 | CB  | THR A 408 | 26.852 | 70.484 | 85.136 | 1.00 22.92 | C |
| ATOM | 3172 | OG1 | THR A 408 | 27.340 | 69.148 | 85.331 | 1.00 24.70 | O |
| ATOM | 3173 | CG2 | THR A 408 | 27.987 | 71.366 | 84.610 | 1.00 21.57 | C |
| ATOM | 3174 | N   | VAL A 409 | 24.499 | 72.471 | 85.700 | 1.00 23.01 | N |
| ATOM | 3175 | CA  | VAL A 409 | 23.831 | 73.742 | 85.463 | 1.00 23.85 | C |
| ATOM | 3176 | C   | VAL A 409 | 23.449 | 74.381 | 86.797 | 1.00 24.38 | C |
| ATOM | 3177 | O   | VAL A 409 | 23.594 | 75.590 | 86.980 | 1.00 23.33 | O |
| ATOM | 3178 | CB  | VAL A 409 | 22.565 | 73.562 | 84.590 | 1.00 22.85 | C |
| ATOM | 3179 | CG1 | VAL A 409 | 21.763 | 74.858 | 84.545 | 1.00 23.27 | C |
| ATOM | 3180 | CG2 | VAL A 409 | 22.967 | 73.167 | 83.184 | 1.00 23.68 | C |
| ATOM | 3181 | N   | ASP A 410 | 22.965 | 73.563 | 87.728 | 1.00 26.99 | N |
| ATOM | 3182 | CA  | ASP A 410 | 22.574 | 74.042 | 89.054 | 1.00 29.45 | C |
| ATOM | 3183 | C   | ASP A 410 | 22.729 | 72.918 | 90.068 | 1.00 31.07 | C |
| ATOM | 3184 | O   | ASP A 410 | 21.818 | 72.118 | 90.268 | 1.00 31.33 | O |
| ATOM | 3185 | CB  | ASP A 410 | 21.121 | 74.538 | 89.053 | 1.00 29.82 | C |
| ATOM | 3186 | CG  | ASP A 410 | 20.620 | 74.910 | 90.454 | 1.00 31.39 | C |
| ATOM | 3187 | OD1 | ASP A 410 | 21.451 | 75.052 | 91.374 | 1.00 32.80 | O |
| ATOM | 3188 | OD2 | ASP A 410 | 19.393 | 75.067 | 90.636 | 1.00 32.07 | O |
| ATOM | 3189 | N   | PRO A 411 | 23.891 | 72.848 | 90.729 | 1.00 32.59 | N |
| ATOM | 3190 | CA  | PRO A 411 | 24.121 | 71.794 | 91.719 | 1.00 33.18 | C |
| ATOM | 3191 | C   | PRO A 411 | 23.049 | 71.677 | 92.807 | 1.00 35.11 | C |
| ATOM | 3192 | O   | PRO A 411 | 22.812 | 70.588 | 93.321 | 1.00 35.38 | O |
| ATOM | 3193 | CB  | PRO A 411 | 25.514 | 72.125 | 92.268 | 1.00 32.74 | C |
| ATOM | 3194 | CG  | PRO A 411 | 25.685 | 73.597 | 91.971 | 1.00 33.92 | C |
| ATOM | 3195 | CD  | PRO A 411 | 25.056 | 73.742 | 90.617 | 1.00 33.33 | C |
| ATOM | 3196 | N   | ASN A 412 | 22.390 | 72.784 | 93.142 | 1.00 36.57 | N |
| ATOM | 3197 | CA  | ASN A 412 | 21.354 | 72.767 | 94.173 | 1.00 37.86 | C |
| ATOM | 3198 | C   | ASN A 412 | 19.975 | 72.409 | 93.615 | 1.00 37.97 | C |
| ATOM | 3199 | O   | ASN A 412 | 18.970 | 72.474 | 94.331 | 1.00 37.55 | O |
| ATOM | 3200 | CB  | ASN A 412 | 21.278 | 74.128 | 94.868 | 1.00 39.62 | C |
| ATOM | 3201 | CG  | ASN A 412 | 22.635 | 74.609 | 95.353 | 1.00 42.81 | C |
| ATOM | 3202 | OD1 | ASN A 412 | 23.333 | 73.905 | 96.091 | 1.00 41.85 | O |
| ATOM | 3203 | ND2 | ASN A 412 | 23.017 | 75.816 | 94.939 | 1.00 43.10 | N |
| ATOM | 3204 | N   | SER A 413 | 19.932 | 72.025 | 92.341 | 1.00 37.02 | N |
| ATOM | 3205 | CA  | SER A 413 | 18.672 | 71.665 | 91.689 | 1.00 36.90 | C |
| ATOM | 3206 | C   | SER A 413 | 17.869 | 70.633 | 92.479 | 1.00 36.44 | C |
| ATOM | 3207 | O   | SER A 413 | 18.376 | 69.563 | 92.818 | 1.00 37.12 | O |
| ATOM | 3208 | CB  | SER A 413 | 18.934 | 71.120 | 90.285 | 1.00 34.99 | C |
| ATOM | 3209 | OG  | SER A 413 | 17.736 | 70.620 | 89.720 | 1.00 33.29 | O |
| ATOM | 3210 | N   | SER A 414 | 16.609 | 70.952 | 92.752 | 1.00 35.94 | N |
| ATOM | 3211 | CA  | SER A 414 | 15.757 | 70.045 | 93.504 | 1.00 37.10 | C |
| ATOM | 3212 | C   | SER A 414 | 14.890 | 69.153 | 92.614 | 1.00 36.15 | C |
| ATOM | 3213 | O   | SER A 414 | 13.880 | 68.618 | 93.066 | 1.00 36.49 | O |
| ATOM | 3214 | CB  | SER A 414 | 14.879 | 70.841 | 94.479 | 1.00 37.79 | C |
| ATOM | 3215 | OG  | SER A 414 | 14.139 | 71.839 | 93.807 | 1.00 39.54 | O |
| ATOM | 3216 | N   | THR A 415 | 15.294 | 68.973 | 91.360 | 1.00 35.15 | N |
| ATOM | 3217 | CA  | THR A 415 | 14.527 | 68.139 | 90.443 | 1.00 35.25 | C |
| ATOM | 3218 | C   | THR A 415 | 15.341 | 67.074 | 89.710 | 1.00 36.40 | C |
| ATOM | 3219 | O   | THR A 415 | 15.061 | 66.777 | 88.548 | 1.00 35.69 | O |
| ATOM | 3220 | CB  | THR A 415 | 13.798 | 68.987 | 89.374 | 1.00 35.94 | C |
| ATOM | 3221 | OG1 | THR A 415 | 14.750 | 69.798 | 88.672 | 1.00 36.06 | O |
| ATOM | 3222 | CG2 | THR A 415 | 12.737 | 69.877 | 90.018 | 1.00 36.06 | C |
| ATOM | 3223 | N   | THR A 416 | 16.346 | 66.501 | 90.370 | 1.00 35.59 | N |
| ATOM | 3224 | CA  | THR A 416 | 17.139 | 65.454 | 89.734 | 1.00 35.86 | C |
| ATOM | 3225 | C   | THR A 416 | 16.262 | 64.205 | 89.659 | 1.00 34.98 | C |
| ATOM | 3226 | O   | THR A 416 | 15.257 | 64.120 | 90.358 | 1.00 35.51 | O |
| ATOM | 3227 | CB  | THR A 416 | 18.435 | 65.168 | 90.517 | 1.00 36.24 | C |
| ATOM | 3228 | OG1 | THR A 416 | 18.136 | 65.023 | 91.908 | 1.00 36.09 | O |
| ATOM | 3229 | CG2 | THR A 416 | 19.422 | 66.306 | 90.332 | 1.00 37.28 | C |
| ATOM | 3230 | N   | ALA A 417 | 16.640 | 63.236 | 88.828 | 1.00 34.91 | N |
| ATOM | 3231 | CA  | ALA A 417 | 15.825 | 62.035 | 88.642 | 1.00 35.52 | C |
| ATOM | 3232 | C   | ALA A 417 | 16.158 | 60.759 | 89.425 | 1.00 36.33 | C |
| ATOM | 3233 | O   | ALA A 417 | 15.277 | 60.184 | 90.073 | 1.00 35.39 | O |
| ATOM | 3234 | CB  | ALA A 417 | 15.755 | 61.705 | 87.153 | 1.00 34.48 | C |
| ATOM | 3235 | N   | LEU A 418 | 17.405 | 60.301 | 89.363 | 1.00 36.81 | N |
| ATOM | 3236 | CA  | LEU A 418 | 17.774 | 59.063 | 90.055 | 1.00 37.75 | C |
| ATOM | 3237 | C   | LEU A 418 | 17.581 | 59.056 | 91.576 | 1.00 37.57 | C |
| ATOM | 3238 | O   | LEU A 418 | 17.130 | 58.055 | 92.136 | 1.00 37.55 | O |
| ATOM· | 3239 | CB  | LEU A 418 | 19.211 | 58.657 | 89.699 | 1.00 36.68 | C |

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ATOM   3240  CG   LEU A 418      19.436  58.233  88.239  1.00 37.72           C
ATOM   3241  CD1  LEU A 418      20.860  57.717  88.064  1.00 37.38           C
ATOM   3242  CD2  LEU A 418      18.438  57.146  87.849  1.00 36.88           C
ATOM   3243  N    THR A 419      17.911  60.158  92.246  1.00 37.57           N
ATOM   3244  CA   THR A 419      17.742  60.227  93.698  1.00 36.87           C
ATOM   3245  C    THR A 419      16.261  60.053  94.032  1.00 36.37           C
ATOM   3246  O    THR A 419      15.425  60.840  93.589  1.00 35.42           O
ATOM   3247  CB   THR A 419      18.230  61.583  94.260  1.00 36.89           C
ATOM   3248  OG1  THR A 419      19.629  61.737  93.986  1.00 36.37           O
ATOM   3249  CG2  THR A 419      18.000  61.657  95.765  1.00 35.40           C
ATOM   3250  N    GLY A 420      15.942  59.014  94.799  1.00 35.79           N
ATOM   3251  CA   GLY A 420      14.560  58.766  95.170  1.00 35.63           C
ATOM   3252  C    GLY A 420      13.780  57.933  94.166  1.00 35.63           C
ATOM   3253  O    GLY A 420      12.557  57.813  94.270  1.00 35.20           O
ATOM   3254  N    SER A 421      14.481  57.360  93.189  1.00 35.48           N
ATOM   3255  CA   SER A 421      13.840  56.532  92.168  1.00 34.82           C
ATOM   3256  C    SER A 421      13.738  55.087  92.647  1.00 34.19           C
ATOM   3257  O    SER A 421      14.529  54.645  93.479  1.00 33.61           O
ATOM   3258  CB   SER A 421      14.639  56.578  90.859  1.00 34.21           C
ATOM   3259  OG   SER A 421      15.902  55.948  91.005  1.00 30.60           O
ATOM   3260  N    THR A 422      12.764  54.353  92.117  1.00 34.27           N
ATOM   3261  CA   THR A 422      12.582  52.960  92.497  1.00 34.67           C
ATOM   3262  C    THR A 422      13.787  52.116  92.086  1.00 34.53           C
ATOM   3263  O    THR A 422      14.087  51.108  92.725  1.00 33.51           O
ATOM   3264  CB   THR A 422      11.308  52.361  91.863  1.00 35.06           C
ATOM   3265  OG1  THR A 422      11.379  52.462  90.434  1.00 35.65           O
ATOM   3266  CG2  THR A 422      10.079  53.095  92.362  1.00 35.00           C
ATOM   3267  N    GLU A 423      14.475  52.531  91.024  1.00 33.78           N
ATOM   3268  CA   GLU A 423      15.651  51.808  90.542  1.00 34.84           C
ATOM   3269  C    GLU A 423      16.764  51.875  91.594  1.00 37.17           C
ATOM   3270  O    GLU A 423      17.491  50.902  91.827  1.00 35.29           O
ATOM   3271  CB   GLU A 423      16.136  52.414  89.219  1.00 33.11           C
ATOM   3272  CG   GLU A 423      17.455  51.841  88.693  1.00 31.37           C
ATOM   3273  CD   GLU A 423      17.727  52.226  87.242  1.00 30.44           C
ATOM   3274  OE1  GLU A 423      16.973  51.774  86.352  1.00 28.27           O
ATOM   3275  OE2  GLU A 423      18.691  52.982  86.991  1.00 27.12           O
ATOM   3276  N    GLU A 424      16.888  53.034  92.226  1.00 37.65           N
ATOM   3277  CA   GLU A 424      17.887  53.236  93.256  1.00 40.03           C
ATOM   3278  C    GLU A 424      17.525  52.434  94.502  1.00 39.99           C
ATOM   3279  O    GLU A 424      18.398  51.896  95.177  1.00 39.04           O
ATOM   3280  CB   GLU A 424      17.978  54.724  93.596  1.00 42.45           C
ATOM   3281  CG   GLU A 424      18.782  55.041  94.844  1.00 46.47           C
ATOM   3282  CD   GLU A 424      18.857  56.533  95.118  1.00 48.71           C
ATOM   3283  OE1  GLU A 424      19.602  57.230  94.395  1.00 49.41           O
ATOM   3284  OE2  GLU A 424      18.162  57.009  96.047  1.00 49.10           O
ATOM   3285  N    GLY A 425      16.232  52.334  94.791  1.00 40.05           N
ATOM   3286  CA   GLY A 425      15.807  51.608  95.975  1.00 42.38           C
ATOM   3287  C    GLY A 425      15.352  50.170  95.801  1.00 43.01           C
ATOM   3288  O    GLY A 425      15.013  49.513  96.788  1.00 43.78           O
ATOM   3289  N    GLN A 426      15.347  49.663  94.572  1.00 42.11           N
ATOM   3290  CA   GLN A 426      14.899  48.291  94.342  1.00 41.63           C
ATOM   3291  C    GLN A 426      15.829  47.433  93.493  1.00 41.53           C
ATOM   3292  O    GLN A 426      15.588  46.233  93.332  1.00 41.70           O
ATOM   3293  CB   GLN A 426      13.504  48.300  93.715  1.00 39.54           C
ATOM   3294  CG   GLN A 426      12.404  48.728  94.671  1.00 38.20           C
ATOM   3295  CD   GLN A 426      11.033  48.707  94.020  1.00 38.02           C
ATOM   3296  OE1  GLN A 426      10.702  47.780  93.273  1.00 35.19           O
ATOM   3297  NE2  GLN A 426      10.222  49.724  94.310  1.00 36.27           N
ATOM   3298  N    PHE A 427      16.882  48.039  92.953  1.00 40.73           N
ATOM   3299  CA   PHE A 427      17.838  47.312  92.119  1.00 41.55           C
ATOM   3300  C    PHE A 427      19.273  47.445  92.640  1.00 42.86           C
ATOM   3301  O    PHE A 427      19.966  46.408  92.727  1.00 42.98           O
ATOM   3302  CB   PHE A 427      17.772  47.807  90.667  1.00 39.75           C
ATOM   3303  CG   PHE A 427      16.464  47.511  89.974  1.00 38.68           C
ATOM   3304  CD1  PHE A 427      15.283  48.126  90.383  1.00 37.76           C
ATOM   3305  CD2  PHE A 427      16.419  46.628  88.899  1.00 36.23           C
ATOM   3306  CE1  PHE A 427      14.077  47.866  89.728  1.00 37.46           C
ATOM   3307  CE2  PHE A 427      15.221  46.364  88.241  1.00 36.61           C
ATOM   3308  CZ   PHE A 427      14.049  46.983  88.656  1.00 36.19           C
TER    3309       PHE A 427
ATOM   3310  N    ALA B   1     -16.768  73.502  46.033  1.00 48.03           N
ATOM   3311  CA   ALA B   1     -18.188  73.081  46.215  1.00 47.43           C
ATOM   3312  C    ALA B   1     -18.298  71.572  46.377  1.00 45.87           C
ATOM   3313  O    ALA B   1     -18.205  70.821  45.406  1.00 46.64           O
ATOM   3314  CB   ALA B   1     -19.026  73.540  45.024  1.00 49.37           C
ATOM   3315  N    SER B   2     -18.501  71.134  47.612  1.00 43.44           N
ATOM   3316  CA   SER B   2     -18.623  69.717  47.903  1.00 41.24           C
ATOM   3317  C    SER B   2     -19.185  69.552  49.301  1.00 39.55           C
ATOM   3318  O    SER B   2     -18.959  70.394  50.171  1.00 39.50           O
ATOM   3319  CB   SER B   2     -17.255  69.037  47.815  1.00 40.14           C
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| ATOM | 3320 | OG | SER B | 2 | -17.336 | 67.681 | 48.206 | 1.00 37.12 | O |
|------|------|-----|-------|---|---------|--------|--------|------------|---|
| ATOM | 3321 | N | VAL B | 3 | -19.925 | 68.474 | 49.513 | 1.00 36.40 | N |
| ATOM | 3322 | CA | VAL B | 3 | -20.501 | 68.218 | 50.821 | 1.00 35.74 | C |
| ATOM | 3323 | C | VAL B | 3 | -19.661 | 67.195 | 51.583 | 1.00 33.71 | C |
| ATOM | 3324 | O | VAL B | 3 | -20.002 | 66.805 | 52.698 | 1.00 33.53 | O |
| ATOM | 3325 | CB | VAL B | 3 | -21.962 | 67.729 | 50.697 | 1.00 36.53 | C |
| ATOM | 3326 | CG1 | VAL B | 3 | -22.817 | 68.831 | 50.096 | 1.00 37.40 | C |
| ATOM | 3327 | CG2 | VAL B | 3 | -22.036 | 66.503 | 49.816 | 1.00 37.04 | C |
| ATOM | 3328 | N | VAL B | 4 | -18.554 | 66.774 | 50.976 | 1.00 31.83 | N |
| ATOM | 3329 | CA | VAL B | 4 | -17.655 | 65.812 | 51.605 | 1.00 29.60 | C |
| ATOM | 3330 | C | VAL B | 4 | -17.016 | 66.436 | 52.840 | 1.00 29.07 | C |
| ATOM | 3331 | O | VAL B | 4 | -16.441 | 67.523 | 52.772 | 1.00 27.93 | O |
| ATOM | 3332 | CB | VAL B | 4 | -16.527 | 65.368 | 50.638 | 1.00 29.63 | C |
| ATOM | 3333 | CG1 | VAL B | 4 | -15.563 | 64.424 | 51.347 | 1.00 29.22 | C |
| ATOM | 3334 | CG2 | VAL B | 4 | -17.127 | 64.681 | 49.421 | 1.00 29.63 | C |
| ATOM | 3335 | N | GLY B | 5 | -17.140 | 65.752 | 53.972 | 1.00 28.85 | N |
| ATOM | 3336 | CA | GLY B | 5 | -16.553 | 66.243 | 55.206 | 1.00 28.77 | C |
| ATOM | 3337 | C | GLY B | 5 | -17.273 | 67.400 | 55.870 | 1.00 29.84 | C |
| ATOM | 3338 | O | GLY B | 5 | -16.726 | 68.020 | 56.786 | 1.00 27.54 | O |
| ATOM | 3339 | N | THR B | 6 | -18.494 | 67.695 | 55.426 | 1.00 30.01 | N |
| ATOM | 3340 | CA | THR B | 6 | -19.256 | 68.800 | 56.008 | 1.00 30.34 | C |
| ATOM | 3341 | C | THR B | 6 | -19.432 | 68.558 | 57.501 | 1.00 28.90 | C |
| ATOM | 3342 | O | THR B | 6 | -19.735 | 67.449 | 57.926 | 1.00 28.57 | O |
| ATOM | 3343 | CB | THR B | 6 | -20.654 | 68.945 | 55.358 | 1.00 32.17 | C |
| ATOM | 3344 | OG1 | THR B | 6 | -20.508 | 69.164 | 53.949 | 1.00 32.45 | O |
| ATOM | 3345 | CG2 | THR B | 6 | -21.398 | 70.129 | 55.962 | 1.00 32.09 | C |
| ATOM | 3346 | N | PRO B | 7 | -19.246 | 69.604 | 58.317 | 1.00 29.39 | N |
| ATOM | 3347 | CA | PRO B | 7 | -19.378 | 69.504 | 59.775 | 1.00 30.27 | C |
| ATOM | 3348 | C | PRO B | 7 | -20.799 | 69.216 | 60.253 | 1.00 30.31 | C |
| ATOM | 3349 | O | PRO B | 7 | -21.770 | 69.625 | 59.618 | 1.00 30.35 | O |
| ATOM | 3350 | CB | PRO B | 7 | -18.894 | 70.870 | 60.259 | 1.00 29.63 | C |
| ATOM | 3351 | CG | PRO B | 7 | -18.003 | 71.344 | 59.142 | 1.00 29.54 | C |
| ATOM | 3352 | CD | PRO B | 7 | -18.775 | 70.942 | 57.932 | 1.00 28.25 | C |
| ATOM | 3353 | N | LYS B | 8 | -20.909 | 68.505 | 61.372 | 1.00 30.32 | N |
| ATOM | 3354 | CA | LYS B | 8 | -22.206 | 68.194 | 61.962 | 1.00 29.25 | C |
| ATOM | 3355 | C | LYS B | 8 | -22.728 | 69.492 | 62.553 | 1.00 30.59 | C |
| ATOM | 3356 | O | LYS B | 8 | -21.961 | 70.432 | 62.778 | 1.00 31.06 | O |
| ATOM | 3357 | CB | LYS B | 8 | -22.065 | 67.173 | 63.092 | 1.00 30.27 | C |
| ATOM | 3358 | CG | LYS B | 8 | -21.666 | 65.774 | 62.674 | 1.00 28.99 | C |
| ATOM | 3359 | CD | LYS B | 8 | -21.380 | 64.919 | 63.904 | 1.00 28.48 | C |
| ATOM | 3360 | CE | LYS B | 8 | -21.005 | 63.496 | 63.510 | 1.00 30.35 | C |
| ATOM | 3361 | NZ | LYS B | 8 | -20.547 | 62.701 | 64.679 | 1.00 32.11 | N |
| ATOM | 3362 | N | SER B | 9 | -24.030 | 69.553 | 62.804 | 1.00 30.76 | N |
| ATOM | 3363 | CA | SER B | 9 | -24.616 | 70.752 | 63.392 | 1.00 29.74 | C |
| ATOM | 3364 | C | SER B | 9 | -24.413 | 70.649 | 64.897 | 1.00 29.20 | C |
| ATOM | 3365 | O | SER B | 9 | -24.244 | 69.551 | 65.425 | 1.00 29.84 | O |
| ATOM | 3366 | CB | SER B | 9 | -26.116 | 70.830 | 63.084 | 1.00 28.25 | C |
| ATOM | 3367 | OG | SER B | 9 | -26.826 | 69.791 | 63.739 | 1.00 26.42 | O |
| ATOM | 3368 | N | ALA B | 10 | -24.428 | 71.788 | 65.579 | 1.00 29.87 | N |
| ATOM | 3369 | CA | ALA B | 10 | -24.266 | 71.805 | 67.025 | 1.00 30.94 | C |
| ATOM | 3370 | C | ALA B | 10 | -25.357 | 70.957 | 67.671 | 1.00 32.47 | C |
| ATOM | 3371 | O | ALA B | 10 | -25.127 | 70.310 | 68.697 | 1.00 33.06 | O |
| ATOM | 3372 | CB | ALA B | 10 | -24.341 | 73.230 | 67.541 | 1.00 30.72 | C |
| ATOM | 3373 | N | GLU B | 11 | -26.540 | 70.962 | 67.061 | 1.00 33.60 | N |
| ATOM | 3374 | CA | GLU B | 11 | -27.680 | 70.199 | 67.561 | 1.00 35.45 | C |
| ATOM | 3375 | C | GLU B | 11 | -27.393 | 68.700 | 67.547 | 1.00 34.94 | C |
| ATOM | 3376 | O | GLU B | 11 | -27.681 | 67.995 | 68.519 | 1.00 34.36 | O |
| ATOM | 3377 | CB | GLU B | 11 | -28.935 | 70.478 | 66.713 | 1.00 38.67 | C |
| ATOM | 3378 | CG | GLU B | 11 | -29.470 | 71.911 | 66.776 | 1.00 42.85 | C |
| ATOM | 3379 | CD | GLU B | 11 | -28.492 | 72.940 | 66.215 | 1.00 45.87 | C |
| ATOM | 3380 | OE1 | GLU B | 11 | -28.012 | 72.757 | 65.075 | 1.00 45.88 | O |
| ATOM | 3381 | OE2 | GLU B | 11 | -28.207 | 73.937 | 66.912 | 1.00 48.01 | O |
| ATOM | 3382 | N | GLN B | 12 | -26.837 | 68.218 | 66.440 | 1.00 34.03 | N |
| ATOM | 3383 | CA | GLN B | 12 | -26.515 | 66.801 | 66.304 | 1.00 35.52 | C |
| ATOM | 3384 | C | GLN B | 12 | -25.497 | 66.396 | 67.361 | 1.00 33.75 | C |
| ATOM | 3385 | O | GLN B | 12 | -25.623 | 65.350 | 67.998 | 1.00 33.21 | O |
| ATOM | 3386 | CB | GLN B | 12 | -25.938 | 66.514 | 64.916 | 1.00 37.39 | C |
| ATOM | 3387 | CG | GLN B | 12 | -26.832 | 66.934 | 63.767 | 1.00 40.56 | C |
| ATOM | 3388 | CD | GLN B | 12 | -26.187 | 66.684 | 62.419 | 1.00 41.50 | C |
| ATOM | 3389 | OE1 | GLN B | 12 | -25.847 | 65.549 | 62.087 | 1.00 43.34 | O |
| ATOM | 3390 | NE2 | GLN B | 12 | -26.013 | 67.744 | 61.637 | 1.00 41.26 | N |
| ATOM | 3391 | N | ILE B | 13 | -24.482 | 67.235 | 67.532 | 1.00 33.66 | N |
| ATOM | 3392 | CA | ILE B | 13 | -23.430 | 66.982 | 68.506 | 1.00 33.52 | C |
| ATOM | 3393 | C | ILE B | 13 | -24.042 | 66.876 | 69.898 | 1.00 33.33 | C |
| ATOM | 3394 | O | ILE B | 13 | -23.786 | 65.926 | 70.636 | 1.00 31.92 | O |
| ATOM | 3395 | CB | ILE B | 13 | -22.380 | 68.123 | 68.494 | 1.00 32.85 | C |
| ATOM | 3396 | CG1 | ILE B | 13 | -21.669 | 68.164 | 67.136 | 1.00 33.07 | C |
| ATOM | 3397 | CG2 | ILE B | 13 | -21.366 | 67.912 | 69.608 | 1.00 32.70 | C |
| ATOM | 3398 | CD1 | ILE B | 13 | -20.590 | 69.225 | 67.038 | 1.00 30.83 | C |
| ATOM | 3399 | N | GLN B | 14 | -24.860 | 67.862 | 70.242 | 1.00 34.49 | N |

| ATOM | 3400 | CA | GLN | B | 14 | -25.517 | 67.905 | 71.542 | 1.00 | 35.69 | C |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 3401 | C | GLN | B | 14 | -26.333 | 66.644 | 71.777 | 1.00 | 36.33 | C |
| ATOM | 3402 | O | GLN | B | 14 | -26.335 | 66.084 | 72.873 | 1.00 | 37.18 | O |
| ATOM | 3403 | CB | GLN | B | 14 | -26.435 | 69.122 | 71.623 | 1.00 | 35.09 | C |
| ATOM | 3404 | CG | GLN | B | 14 | -27.075 | 69.309 | 72.976 | 1.00 | 35.95 | C |
| ATOM | 3405 | CD | GLN | B | 14 | -26.045 | 69.498 | 74.068 | 1.00 | 37.46 | C |
| ATOM | 3406 | OE1 | GLN | B | 14 | -25.250 | 70.439 | 74.031 | 1.00 | 36.84 | O |
| ATOM | 3407 | NE2 | GLN | B | 14 | -26.048 | 68.600 | 75.047 | 1.00 | 36.21 | N |
| ATOM | 3408 | N | GLN | B | 15 | -27.030 | 66.202 | 70.739 | 1.00 | 36.82 | N |
| ATOM | 3409 | CA | GLN | B | 15 | -27.856 | 65.013 | 70.832 | 1.00 | 38.02 | C |
| ATOM | 3410 | C | GLN | B | 15 | -27.030 | 63.777 | 71.162 | 1.00 | 37.47 | C |
| ATOM | 3411 | O | GLN | B | 15 | -27.421 | 62.971 | 72.005 | 1.00 | 37.45 | O |
| ATOM | 3412 | CB | GLN | B | 15 | -28.609 | 64.808 | 69.525 | 1.00 | 40.14 | C |
| ATOM | 3413 | CG | GLN | B | 15 | -29.349 | 63.498 | 69.445 | 1.00 | 45.17 | C |
| ATOM | 3414 | CD | GLN | B | 15 | -30.158 | 63.393 | 68.178 | 1.00 | 49.69 | C |
| ATOM | 3415 | OE1 | GLN | B | 15 | -31.129 | 64.130 | 67.987 | 1.00 | 51.83 | O |
| ATOM | 3416 | NE2 | GLN | B | 15 | -29.757 | 62.485 | 67.291 | 1.00 | 50.73 | N |
| ATOM | 3417 | N | GLU | B | 16 | -25.892 | 63.629 | 70.491 | 1.00 | 37.26 | N |
| ATOM | 3418 | CA | GLU | B | 16 | -25.012 | 62.492 | 70.731 | 1.00 | 36.83 | C |
| ATOM | 3419 | C | GLU | B | 16 | -24.541 | 62.500 | 72.175 | 1.00 | 35.49 | C |
| ATOM | 3420 | O | GLU | B | 16 | -24.488 | 61.462 | 72.831 | 1.00 | 36.40 | O |
| ATOM | 3421 | CB | GLU | B | 16 | -23.803 | 62.548 | 69.793 | 1.00 | 38.30 | C |
| ATOM | 3422 | CG | GLU | B | 16 | -24.105 | 62.103 | 68.374 | 1.00 | 42.46 | C |
| ATOM | 3423 | CD | GLU | B | 16 | -22.977 | 62.409 | 67.408 | 1.00 | 45.86 | C |
| ATOM | 3424 | OE1 | GLU | B | 16 | -21.808 | 62.099 | 67.731 | 1.00 | 47.98 | O |
| ATOM | 3425 | OE2 | GLU | B | 16 | -23.262 | 62.956 | 66.321 | 1.00 | 46.56 | O |
| ATOM | 3426 | N | TRP | B | 17 | -24.206 | 63.684 | 72.669 | 1.00 | 34.21 | N |
| ATOM | 3427 | CA | TRP | B | 17 | -23.736 | 63.829 | 74.036 | 1.00 | 33.81 | C |
| ATOM | 3428 | C | TRP | B | 17 | -24.803 | 63.444 | 75.055 | 1.00 | 34.59 | C |
| ATOM | 3429 | O | TRP | B | 17 | -24.488 | 62.894 | 76.113 | 1.00 | 34.35 | O |
| ATOM | 3430 | CB | TRP | B | 17 | -23.285 | 65.273 | 74.291 | 1.00 | 31.59 | C |
| ATOM | 3431 | CG | TRP | B | 17 | -22.040 | 65.672 | 73.549 | 1.00 | 31.15 | C |
| ATOM | 3432 | CD1 | TRP | B | 17 | -21.250 | 64.871 | 72.771 | 1.00 | 30.71 | C |
| ATOM | 3433 | CD2 | TRP | B | 17 | -21.433 | 66.973 | 73.528 | 1.00 | 30.81 | C |
| ATOM | 3434 | NE1 | TRP | B | 17 | -20.191 | 65.593 | 72.267 | 1.00 | 30.43 | N |
| ATOM | 3435 | CE2 | TRP | B | 17 | -20.279 | 66.884 | 72.716 | 1.00 | 29.71 | C |
| ATOM | 3436 | CE3 | TRP | B | 17 | -21.752 | 68.205 | 74.119 | 1.00 | 29.83 | C |
| ATOM | 3437 | CZ2 | TRP | B | 17 | -19.443 | 67.980 | 72.478 | 1.00 | 29.37 | C |
| ATOM | 3438 | CZ3 | TRP | B | 17 | -20.921 | 69.295 | 73.883 | 1.00 | 28.67 | C |
| ATOM | 3439 | CH2 | TRP | B | 17 | -19.779 | 69.173 | 73.068 | 1.00 | 29.80 | C |
| ATOM | 3440 | N | ASP | B | 18 | -26.064 | 63.724 | 74.733 | 1.00 | 35.18 | N |
| ATOM | 3441 | CA | ASP | B | 18 | -27.163 | 63.427 | 75.648 | 1.00 | 35.42 | C |
| ATOM | 3442 | C | ASP | B | 18 | -27.730 | 62.026 | 75.545 | 1.00 | 34.85 | C |
| ATOM | 3443 | O | ASP | B | 18 | -28.373 | 61.552 | 76.478 | 1.00 | 36.17 | O |
| ATOM | 3444 | CB | ASP | B | 18 | -28.318 | 64.409 | 75.445 | 1.00 | 35.64 | C |
| ATOM | 3445 | CG | ASP | B | 18 | -27.889 | 65.847 | 75.565 | 1.00 | 36.03 | C |
| ATOM | 3446 | OD1 | ASP | B | 18 | -27.045 | 66.148 | 76.433 | 1.00 | 36.11 | O |
| ATOM | 3447 | OD2 | ASP | B | 18 | -28.412 | 66.678 | 74.796 | 1.00 | 37.34 | O |
| ATOM | 3448 | N | THR | B | 19 | -27.497 | 61.360 | 74.423 | 1.00 | 35.08 | N |
| ATOM | 3449 | CA | THR | B | 19 | -28.054 | 60.029 | 74.234 | 1.00 | 35.86 | C |
| ATOM | 3450 | C | THR | B | 19 | -27.070 | 58.867 | 74.208 | 1.00 | 35.56 | C |
| ATOM | 3451 | O | THR | B | 19 | -27.392 | 57.774 | 74.681 | 1.00 | 35.09 | O |
| ATOM | 3452 | CB | THR | B | 19 | -28.900 | 59.979 | 72.950 | 1.00 | 36.23 | C |
| ATOM | 3453 | OG1 | THR | B | 19 | -28.072 | 60.237 | 71.809 | 1.00 | 35.75 | O |
| ATOM | 3454 | CG2 | THR | B | 19 | -29.984 | 61.025 | 73.014 | 1.00 | 36.23 | C |
| ATOM | 3455 | N | ASN | B | 20 | -25.880 | 59.087 | 73.660 | 1.00 | 34.28 | N |
| ATOM | 3456 | CA | ASN | B | 20 | -24.896 | 58.015 | 73.597 | 1.00 | 33.04 | C |
| ATOM | 3457 | C | ASN | B | 20 | -24.373 | 57.658 | 74.991 | 1.00 | 32.19 | C |
| ATOM | 3458 | O | ASN | B | 20 | -23.857 | 58.511 | 75.705 | 1.00 | 33.04 | O |
| ATOM | 3459 | CB | ASN | B | 20 | -23.724 | 58.410 | 72.700 | 1.00 | 32.41 | C |
| ATOM | 3460 | CG | ASN | B | 20 | -22.869 | 57.218 | 72.322 | 1.00 | 33.32 | C |
| ATOM | 3461 | OD1 | ASN | B | 20 | -22.623 | 56.336 | 73.145 | 1.00 | 32.44 | O |
| ATOM | 3462 | ND2 | ASN | B | 20 | -22.406 | 57.185 | 71.077 | 1.00 | 33.47 | N |
| ATOM | 3463 | N | PRO | B | 21 | -24.506 | 56.385 | 75.394 | 1.00 | 32.08 | N |
| ATOM | 3464 | CA | PRO | B | 21 | -24.045 | 55.912 | 76.707 | 1.00 | 31.71 | C |
| ATOM | 3465 | C | PRO | B | 21 | -22.552 | 56.179 | 76.910 | 1.00 | 31.33 | C |
| ATOM | 3466 | O | PRO | B | 21 | -22.065 | 56.216 | 78.041 | 1.00 | 30.67 | O |
| ATOM | 3467 | CB | PRO | B | 21 | -24.349 | 54.415 | 76.666 | 1.00 | 32.44 | C |
| ATOM | 3468 | CG | PRO | B | 21 | -25.508 | 54.322 | 75.718 | 1.00 | 33.36 | C |
| ATOM | 3469 | CD | PRO | B | 21 | -25.123 | 55.287 | 74.630 | 1.00 | 32.05 | C |
| ATOM | 3470 | N | ARG | B | 22 | -21.833 | 56.351 | 75.804 | 1.00 | 30.07 | N |
| ATOM | 3471 | CA | ARG | B | 22 | -20.401 | 56.621 | 75.853 | 1.00 | 29.02 | C |
| ATOM | 3472 | C | ARG | B | 22 | -20.115 | 57.818 | 76.746 | 1.00 | 28.75 | C |
| ATOM | 3473 | O | ARG | B | 22 | -19.164 | 57.810 | 77.526 | 1.00 | 29.52 | O |
| ATOM | 3474 | CB | ARG | B | 22 | -19.869 | 56.903 | 74.447 | 1.00 | 26.95 | C |
| ATOM | 3475 | CG | ARG | B | 22 | -18.416 | 57.377 | 74.395 | 1.00 | 26.21 | C |
| ATOM | 3476 | CD | ARG | B | 22 | -17.448 | 56.294 | 74.845 | 1.00 | 25.42 | C |
| ATOM | 3477 | NE | ARG | B | 22 | -16.054 | 56.722 | 74.741 | 1.00 | 25.51 | N |
| ATOM | 3478 | CZ | ARG | B | 22 | -15.449 | 57.542 | 75.598 | 1.00 | 27.05 | C |
| ATOM | 3479 | NH1 | ARG | B | 22 | -16.111 | 58.035 | 76.643 | 1.00 | 26.79 | N |

| ATOM | 3480 | NH2 | ARG | B | 22 | -14.177 | 57.872 | 75.408 | 1.00 | 25.10 | N |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 3481 | N | TRP | B | 23 | -20.957 | 58.839 | 76.633 | 1.00 | 30.04 | N |
| ATOM | 3482 | CA | TRP | B | 23 | -20.799 | 60.073 | 77.400 | 1.00 | 30.91 | C |
| ATOM | 3483 | C | TRP | B | 23 | -21.628 | 60.115 | 78.678 | 1.00 | 31.31 | C |
| ATOM | 3484 | O | TRP | B | 23 | -21.866 | 61.187 | 79.231 | 1.00 | 31.78 | O |
| ATOM | 3485 | CB | TRP | B | 23 | -21.173 | 61.258 | 76.514 | 1.00 | 28.60 | C |
| ATOM | 3486 | CG | TRP | B | 23 | -20.573 | 61.150 | 75.154 | 1.00 | 29.43 | C |
| ATOM | 3487 | CD1 | TRP | B | 23 | -21.239 | 61.091 | 73.965 | 1.00 | 30.26 | C |
| ATOM | 3488 | CD2 | TRP | B | 23 | -19.180 | 61.075 | 74.838 | 1.00 | 28.95 | C |
| ATOM | 3489 | NE1 | TRP | B | 23 | -20.345 | 60.983 | 72.926 | 1.00 | 30.70 | N |
| ATOM | 3490 | CE2 | TRP | B | 23 | -19.074 | 60.972 | 73.435 | 1.00 | 28.84 | C |
| ATOM | 3491 | CE3 | TRP | B | 23 | -18.010 | 61.083 | 75.606 | 1.00 | 26.93 | C |
| ATOM | 3492 | CZ2 | TRP | B | 23 | -17.844 | 60.878 | 72.783 | 1.00 | 27.98 | C |
| ATOM | 3493 | CZ3 | TRP | B | 23 | -16.786 | 60.990 | 74.957 | 1.00 | 27.34 | C |
| ATOM | 3494 | CH2 | TRP | B | 23 | -16.714 | 60.889 | 73.560 | 1.00 | 27.23 | C |
| ATOM | 3495 | N | LYS | B | 24 | -22.053 | 58.950 | 79.151 | 1.00 | 33.01 | N |
| ATOM | 3496 | CA | LYS | B | 24 | -22.867 | 58.873 | 80.359 | 1.00 | 35.68 | C |
| ATOM | 3497 | C | LYS | B | 24 | -22.289 | 59.651 | 81.540 | 1.00 | 36.27 | C |
| ATOM | 3498 | O | LYS | B | 24 | -22.993 | 60.438 | 82.179 | 1.00 | 36.38 | O |
| ATOM | 3499 | CB | LYS | B | 24 | -23.065 | 57.413 | 80.771 | 1.00 | 37.02 | C |
| ATOM | 3500 | CG | LYS | B | 24 | -23.869 | 57.248 | 82.051 | 1.00 | 41.80 | C |
| ATOM | 3501 | CD | LYS | B | 24 | -23.963 | 55.788 | 82.492 | 1.00 | 44.47 | C |
| ATOM | 3502 | CE | LYS | B | 24 | -22.595 | 55.219 | 82.849 | 1.00 | 47.11 | C |
| ATOM | 3503 | NZ | LYS | B | 24 | -22.663 | 53.823 | 83.374 | 1.00 | 47.83 | N |
| ATOM | 3504 | N | ASP | B | 25 | -21.009 | 59.432 | 81.828 | 1.00 | 35.85 | N |
| ATOM | 3505 | CA | ASP | B | 25 | -20.360 | 60.101 | 82.955 | 1.00 | 36.42 | C |
| ATOM | 3506 | C | ASP | B | 25 | -19.332 | 61.156 | 82.544 | 1.00 | 34.19 | C |
| ATOM | 3507 | O | ASP | B | 25 | -18.459 | 61.513 | 83.331 | 1.00 | 32.41 | O |
| ATOM | 3508 | CB | ASP | B | 25 | -19.667 | 59.063 | 83.842 | 1.00 | 38.03 | C |
| ATOM | 3509 | CG | ASP | B | 25 | -20.592 | 57.934 | 84.255 | 1.00 | 39.68 | C |
| ATOM | 3510 | OD1 | ASP | B | 25 | -21.591 | 58.212 | 84.956 | 1.00 | 40.44 | O |
| ATOM | 3511 | OD2 | ASP | B | 25 | -20.314 | 56.771 | 83.880 | 1.00 | 37.05 | O |
| ATOM | 3512 | N | VAL | B | 26 | -19.436 | 61.658 | 81.321 | 1.00 | 32.96 | N |
| ATOM | 3513 | CA | VAL | B | 26 | -18.483 | 62.651 | 80.850 | 1.00 | 31.54 | C |
| ATOM | 3514 | C | VAL | B | 26 | -18.999 | 64.073 | 80.974 | 1.00 | 30.47 | C |
| ATOM | 3515 | O | VAL | B | 26 | -20.077 | 64.403 | 80.492 | 1.00 | 30.57 | O |
| ATOM | 3516 | CB | VAL | B | 26 | -18.094 | 62.385 | 79.380 | 1.00 | 31.46 | C |
| ATOM | 3517 | CG1 | VAL | B | 26 | -17.131 | 63.453 | 78.887 | 1.00 | 29.70 | C |
| ATOM | 3518 | CG2 | VAL | B | 26 | -17.465 | 61.005 | 79.260 | 1.00 | 30.53 | C |
| ATOM | 3519 | N | THR | B | 27 | -18.213 | 64.911 | 81.633 | 1.00 | 30.67 | N |
| ATOM | 3520 | CA | THR | B | 27 | -18.558 | 66.312 | 81.816 | 1.00 | 29.51 | C |
| ATOM | 3521 | C | THR | B | 27 | -17.739 | 67.151 | 80.847 | 1.00 | 29.28 | C |
| ATOM | 3522 | O | THR | B | 27 | -16.536 | 66.939 | 80.705 | 1.00 | 29.15 | O |
| ATOM | 3523 | CB | THR | B | 27 | -18.242 | 66.783 | 83.246 | 1.00 | 29.46 | C |
| ATOM | 3524 | OG1 | THR | B | 27 | -19.085 | 66.090 | 84.170 | 1.00 | 31.50 | O |
| ATOM | 3525 | CG2 | THR | B | 27 | -18.456 | 68.284 | 83.378 | 1.00 | 28.75 | C |
| ATOM | 3526 | N | ARG | B | 28 | -18.401 | 68.096 | 80.186 | 1.00 | 28.78 | N |
| ATOM | 3527 | CA | ARG | B | 28 | -17.759 | 68.997 | 79.233 | 1.00 | 27.61 | C |
| ATOM | 3528 | C | ARG | B | 28 | -18.084 | 70.428 | 79.655 | 1.00 | 27.59 | C |
| ATOM | 3529 | O | ARG | B | 28 | -19.246 | 70.822 | 79.655 | 1.00 | 27.34 | O |
| ATOM | 3530 | CB | ARG | B | 28 | -18.291 | 68.749 | 77.817 | 1.00 | 25.02 | C |
| ATOM | 3531 | CG | ARG | B | 28 | -17.876 | 67.424 | 77.175 | 1.00 | 25.28 | C |
| ATOM | 3532 | CD | ARG | B | 28 | -18.571 | 67.264 | 75.824 | 1.00 | 26.27 | C |
| ATOM | 3533 | NE | ARG | B | 28 | -17.956 | 66.273 | 74.944 | 1.00 | 25.40 | N |
| ATOM | 3534 | CZ | ARG | B | 28 | -18.165 | 64.963 | 75.014 | 1.00 | 26.64 | C |
| ATOM | 3535 | NH1 | ARG | B | 28 | -18.980 | 64.462 | 75.931 | 1.00 | 28.47 | N |
| ATOM | 3536 | NH2 | ARG | B | 28 | -17.574 | 64.152 | 74.148 | 1.00 | 28.58 | N |
| ATOM | 3537 | N | THR | B | 29 | -17.061 | 71.205 | 80.007 | 1.00 | 28.44 | N |
| ATOM | 3538 | CA | THR | B | 29 | -17.272 | 72.582 | 80.440 | 1.00 | 28.55 | C |
| ATOM | 3539 | C | THR | B | 29 | -17.381 | 73.589 | 79.293 | 1.00 | 28.97 | C |
| ATOM | 3540 | O | THR | B | 29 | -17.317 | 74.799 | 79.518 | 1.00 | 28.48 | O |
| ATOM | 3541 | CB | THR | B | 29 | -16.166 | 73.050 | 81.434 | 1.00 | 29.81 | C |
| ATOM | 3542 | OG1 | THR | B | 29 | -14.885 | 73.029 | 80.793 | 1.00 | 31.95 | O |
| ATOM | 3543 | CG2 | THR | B | 29 | -16.129 | 72.138 | 82.661 | 1.00 | 27.48 | C |
| ATOM | 3544 | N | TYR | B | 30 | -17.532 | 73.087 | 78.068 | 1.00 | 27.63 | N |
| ATOM | 3545 | CA | TYR | B | 30 | -17.700 | 73.948 | 76.900 | 1.00 | 25.68 | C |
| ATOM | 3546 | C | TYR | B | 30 | -18.946 | 73.466 | 76.170 | 1.00 | 25.23 | C |
| ATOM | 3547 | O | TYR | B | 30 | -19.468 | 72.401 | 76.479 | 1.00 | 23.93 | O |
| ATOM | 3548 | CB | TYR | B | 30 | -16.470 | 73.898 | 75.982 | 1.00 | 25.47 | C |
| ATOM | 3549 | CG | TYR | B | 30 | -15.978 | 72.506 | 75.661 | 1.00 | 25.75 | C |
| ATOM | 3550 | CD1 | TYR | B | 30 | -16.702 | 71.659 | 74.822 | 1.00 | 24.61 | C |
| ATOM | 3551 | CD2 | TYR | B | 30 | -14.796 | 72.029 | 76.220 | 1.00 | 25.02 | C |
| ATOM | 3552 | CE1 | TYR | B | 30 | -16.258 | 70.360 | 74.549 | 1.00 | 25.59 | C |
| ATOM | 3553 | CE2 | TYR | B | 30 | -14.342 | 70.742 | 75.959 | 1.00 | 25.87 | C |
| ATOM | 3554 | CZ | TYR | B | 30 | -15.074 | 69.908 | 75.123 | 1.00 | 26.86 | C |
| ATOM | 3555 | OH | TYR | B | 30 | -14.614 | 68.632 | 74.871 | 1.00 | 22.91 | O |
| ATOM | 3556 | N | SER | B | 31 | -19.422 | 74.241 | 75.201 | 1.00 | 26.08 | N |
| ATOM | 3557 | CA | SER | B | 31 | -20.640 | 73.881 | 74.478 | 1.00 | 27.02 | C |
| ATOM | 3558 | C | SER | B | 31 | -20.408 | 73.190 | 73.149 | 1.00 | 27.74 | C |
| ATOM | 3559 | O | SER | B | 31 | -19.297 | 73.179 | 72.621 | 1.00 | 28.87 | O |

| ATOM | 3560 | CB | SER B | 31 | -21.489 | 75.128 | 74.230 | 1.00 | 26.61 | C |
|------|------|-----|-------|----|---------|--------|--------|------|-------|---|
| ATOM | 3561 | OG | SER B | 31 | -20.860 | 75.986 | 73.286 | 1.00 | 27.12 | O |
| ATOM | 3562 | N | ALA B | 32 | -21.480 | 72.617 | 72.613 | 1.00 | 28.51 | N |
| ATOM | 3563 | CA | ALA B | 32 | -21.428 | 71.940 | 71.327 | 1.00 | 30.25 | C |
| ATOM | 3564 | C | ALA B | 32 | -21.124 | 72.999 | 70.272 | 1.00 | 31.04 | C |
| ATOM | 3565 | O | ALA B | 32 | -20.396 | 72.745 | 69.312 | 1.00 | 31.84 | O |
| ATOM | 3566 | CB | ALA B | 32 | -22.766 | 71.266 | 71.034 | 1.00 | 28.30 | C |
| ATOM | 3567 | N | GLU B | 33 | -21.679 | 74.192 | 70.470 | 1.00 | 32.07 | N |
| ATOM | 3568 | CA | GLU B | 33 | -21.467 | 75.305 | 69.552 | 1.00 | 33.35 | C |
| ATOM | 3569 | C | GLU B | 33 | -19.981 | 75.630 | 69.488 | 1.00 | 31.26 | C |
| ATOM | 3570 | O | GLU B | 33 | -19.444 | 75.924 | 68.419 | 1.00 | 31.62 | O |
| ATOM | 3571 | CB | GLU B | 33 | -22.243 | 76.546 | 70.017 | 1.00 | 36.45 | C |
| ATOM | 3572 | CG | GLU B | 33 | -23.766 | 76.395 | 70.012 | 1.00 | 42.31 | C |
| ATOM | 3573 | CD | GLU B | 33 | -24.259 | 75.307 | 70.959 | 1.00 | 46.19 | C |
| ATOM | 3574 | OE1 | GLU B | 33 | -23.965 | 75.392 | 72.173 | 1.00 | 47.12 | O |
| ATOM | 3575 | OE2 | GLU B | 33 | -24.942 | 74.366 | 70.487 | 1.00 | 48.68 | O |
| ATOM | 3576 | N | ASP B | 34 | -19.322 | 75.574 | 70.641 | 1.00 | 30.02 | N |
| ATOM | 3577 | CA | ASP B | 34 | -17.896 | 75.861 | 70.712 | 1.00 | 28.57 | C |
| ATOM | 3578 | C | ASP B | 34 | -17.107 | 74.917 | 69.818 | 1.00 | 27.27 | C |
| ATOM | 3579 | O | ASP B | 34 | -16.207 | 75.346 | 69.107 | 1.00 | 28.44 | O |
| ATOM | 3580 | CB | ASP B | 34 | -17.387 | 75.748 | 72.152 | 1.00 | 27.21 | C |
| ATOM | 3581 | CG | ASP B | 34 | -17.911 | 76.854 | 73.043 | 1.00 | 28.65 | C |
| ATOM | 3582 | OD1 | ASP B | 34 | -18.072 | 77.989 | 72.544 | 1.00 | 29.76 | O |
| ATOM | 3583 | OD2 | ASP B | 34 | -18.146 | 76.596 | 74.244 | 1.00 | 29.69 | O |
| ATOM | 3584 | N | VAL B | 35 | -17.446 | 73.632 | 69.857 | 1.00 | 26.01 | N |
| ATOM | 3585 | CA | VAL B | 35 | -16.758 | 72.641 | 69.033 | 1.00 | 24.51 | C |
| ATOM | 3586 | C | VAL B | 35 | -16.922 | 72.980 | 67.553 | 1.00 | 25.65 | C |
| ATOM | 3587 | O | VAL B | 35 | -15.937 | 73.112 | 66.826 | 1.00 | 26.39 | O |
| ATOM | 3588 | CB | VAL B | 35 | -17.308 | 71.215 | 69.287 | 1.00 | 22.72 | C |
| ATOM | 3589 | CG1 | VAL B | 35 | -16.555 | 70.210 | 68.442 | 1.00 | 19.00 | C |
| ATOM | 3590 | CG2 | VAL B | 35 | -17.183 | 70.862 | 70.767 | 1.00 | 20.41 | C |
| ATOM | 3591 | N | VAL B | 36 | -18.169 | 73.130 | 67.115 | 1.00 | 25.53 | N |
| ATOM | 3592 | CA | VAL B | 36 | -18.464 | 73.453 | 65.722 | 1.00 | 23.55 | C |
| ATOM | 3593 | C | VAL B | 36 | -17.681 | 74.670 | 65.238 | 1.00 | 22.67 | C |
| ATOM | 3594 | O | VAL B | 36 | -17.129 | 74.665 | 64.138 | 1.00 | 22.38 | O |
| ATOM | 3595 | CB | VAL B | 36 | -19.972 | 73.730 | 65.529 | 1.00 | 25.25 | C |
| ATOM | 3596 | CG1 | VAL B | 36 | -20.238 | 74.227 | 64.117 | 1.00 | 25.17 | C |
| ATOM | 3597 | CG2 | VAL B | 36 | -20.771 | 72.462 | 65.809 | 1.00 | 24.65 | C |
| ATOM | 3598 | N | ALA B | 37 | -17.634 | 75.710 | 66.065 | 1.00 | 21.96 | N |
| ATOM | 3599 | CA | ALA B | 37 | -16.928 | 76.939 | 65.713 | 1.00 | 21.89 | C |
| ATOM | 3600 | C | ALA B | 37 | -15.441 | 76.728 | 65.417 | 1.00 | 22.71 | C |
| ATOM | 3601 | O | ALA B | 37 | -14.801 | 77.577 | 64.800 | 1.00 | 24.67 | O |
| ATOM | 3602 | CB | ALA B | 37 | -17.093 | 77.970 | 66.832 | 1.00 | 21.37 | C |
| ATOM | 3603 | N | LEU B | 38 | -14.891 | 75.598 | 65.847 | 1.00 | 22.81 | N |
| ATOM | 3604 | CA | LEU B | 38 | -13.475 | 75.318 | 65.625 | 1.00 | 22.65 | C |
| ATOM | 3605 | C | LEU B | 38 | -13.226 | 74.325 | 64.492 | 1.00 | 23.20 | C |
| ATOM | 3606 | O | LEU B | 38 | -12.075 | 74.039 | 64.158 | 1.00 | 23.03 | O |
| ATOM | 3607 | CB | LEU B | 38 | -12.836 | 74.776 | 66.911 | 1.00 | 18.32 | C |
| ATOM | 3608 | CG | LEU B | 38 | -12.756 | 75.721 | 68.108 | 1.00 | 15.88 | C |
| ATOM | 3609 | CD1 | LEU B | 38 | -12.348 | 74.944 | 69.354 | 1.00 | 16.59 | C |
| ATOM | 3610 | CD2 | LEU B | 38 | -11.763 | 76.834 | 67.815 | 1.00 | 14.75 | C |
| ATOM | 3611 | N | GLN B | 39 | -14.295 | 73.819 | 63.888 | 1.00 | 22.82 | N |
| ATOM | 3612 | CA | GLN B | 39 | -14.155 | 72.825 | 62.829 | 1.00 | 23.48 | C |
| ATOM | 3613 | C | GLN B | 39 | -13.999 | 73.346 | 61.407 | 1.00 | 23.58 | C |
| ATOM | 3614 | O | GLN B | 39 | -13.857 | 72.555 | 60.470 | 1.00 | 23.56 | O |
| ATOM | 3615 | CB | GLN B | 39 | -15.336 | 71.849 | 62.882 | 1.00 | 22.15 | C |
| ATOM | 3616 | CG | GLN B | 39 | -15.445 | 71.118 | 64.202 | 1.00 | 23.97 | C |
| ATOM | 3617 | CD | GLN B | 39 | -16.572 | 70.117 | 64.227 | 1.00 | 23.82 | C |
| ATOM | 3618 | OE1 | GLN B | 39 | -17.697 | 70.430 | 63.852 | 1.00 | 28.89 | O |
| ATOM | 3619 | NE2 | GLN B | 39 | -16.280 | 68.907 | 64.688 | 1.00 | 21.94 | N |
| ATOM | 3620 | N | GLY B | 40 | -13.994 | 74.663 | 61.234 | 1.00 | 23.24 | N |
| ATOM | 3621 | CA | GLY B | 40 | -13.879 | 75.194 | 59.888 | 1.00 | 24.43 | C |
| ATOM | 3622 | C | GLY B | 40 | -15.083 | 74.727 | 59.085 | 1.00 | 25.07 | C |
| ATOM | 3623 | O | GLY B | 40 | -16.163 | 74.545 | 59.643 | 1.00 | 24.99 | O |
| ATOM | 3624 | N | SER B | 41 | -14.909 | 74.514 | 57.785 | 1.00 | 25.62 | N |
| ATOM | 3625 | CA | SER B | 41 | -16.010 | 74.062 | 56.936 | 1.00 | 25.80 | C |
| ATOM | 3626 | C | SER B | 41 | -15.816 | 72.621 | 56.462 | 1.00 | 25.25 | C |
| ATOM | 3627 | O | SER B | 41 | -16.652 | 72.072 | 55.735 | 1.00 | 23.29 | O |
| ATOM | 3628 | CB | SER B | 41 | -16.151 | 74.989 | 55.730 | 1.00 | 27.28 | C |
| ATOM | 3629 | OG | SER B | 41 | -14.907 | 75.145 | 55.076 | 1.00 | 29.53 | O |
| ATOM | 3630 | N | VAL B | 42 | -14.709 | 72.014 | 56.878 | 1.00 | 23.30 | N |
| ATOM | 3631 | CA | VAL B | 42 | -14.410 | 70.638 | 56.507 | 1.00 | 22.46 | C |
| ATOM | 3632 | C | VAL B | 42 | -13.802 | 69.887 | 57.681 | 1.00 | 22.12 | C |
| ATOM | 3633 | O | VAL B | 42 | -12.864 | 70.365 | 58.319 | 1.00 | 21.64 | O |
| ATOM | 3634 | CB | VAL B | 42 | -13.411 | 70.565 | 55.323 | 1.00 | 23.12 | C |
| ATOM | 3635 | CG1 | VAL B | 42 | -13.151 | 69.113 | 54.957 | 1.00 | 21.54 | C |
| ATOM | 3636 | CG2 | VAL B | 42 | -13.958 | 71.316 | 54.126 | 1.00 | 21.66 | C |
| ATOM | 3637 | N | VAL B | 43 | -14.348 | 68.714 | 57.972 | 1.00 | 21.54 | N |
| ATOM | 3638 | CA | VAL B | 43 | -13.833 | 67.888 | 59.052 | 1.00 | 21.68 | C |
| ATOM | 3639 | C | VAL B | 43 | -13.292 | 66.601 | 58.449 | 1.00 | 22.48 | C |

| | | | | | | | | | | | |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 3640 | O   | VAL | B | 43 | -14.007 | 65.865 | 57.766 | 1.00 | 21.18 | O |
| ATOM | 3641 | CB  | VAL | B | 43 | -14.926 | 67.530 | 60.083 | 1.00 | 23.09 | C |
| ATOM | 3642 | CG1 | VAL | B | 43 | -14.408 | 66.472 | 61.052 | 1.00 | 21.05 | C |
| ATOM | 3643 | CG2 | VAL | B | 43 | -15.335 | 68.774 | 60.854 | 1.00 | 24.13 | C |
| ATOM | 3644 | N   | GLU | B | 44 | -12.014 | 66.342 | 58.689 | 1.00 | 22.61 | N |
| ATOM | 3645 | CA  | GLU | B | 44 | -11.392 | 65.135 | 58.183 | 1.00 | 21.49 | C |
| ATOM | 3646 | C   | GLU | B | 44 | -11.874 | 63.947 | 58.988 | 1.00 | 21.21 | C |
| ATOM | 3647 | O   | GLU | B | 44 | -12.010 | 64.033 | 60.206 | 1.00 | 21.04 | O |
| ATOM | 3648 | CB  | GLU | B | 44 | -9.877  | 65.231 | 58.293 | 1.00 | 20.35 | C |
| ATOM | 3649 | CG  | GLU | B | 44 | -9.235  | 66.083 | 57.231 | 1.00 | 19.95 | C |
| ATOM | 3650 | CD  | GLU | B | 44 | -7.726  | 66.076 | 57.339 | 1.00 | 19.75 | C |
| ATOM | 3651 | OE1 | GLU | B | 44 | -7.192  | 66.765 | 58.229 | 1.00 | 20.61 | O |
| ATOM | 3652 | OE2 | GLU | B | 44 | -7.078  | 65.371 | 56.541 | 1.00 | 18.42 | O |
| ATOM | 3653 | N   | GLU | B | 45 | -12.143 | 62.845 | 58.300 | 1.00 | 20.36 | N |
| ATOM | 3654 | CA  | GLU | B | 45 | -12.582 | 61.626 | 58.956 | 1.00 | 20.71 | C |
| ATOM | 3655 | C   | GLU | B | 45 | -11.320 | 60.886 | 59.397 | 1.00 | 20.90 | C |
| ATOM | 3656 | O   | GLU | B | 45 | -10.377 | 60.725 | 58.612 | 1.00 | 21.49 | O |
| ATOM | 3657 | CB  | GLU | B | 45 | -13.398 | 60.762 | 57.984 | 1.00 | 21.58 | C |
| ATOM | 3658 | CG  | GLU | B | 45 | -13.755 | 59.357 | 58.487 | 1.00 | 24.58 | C |
| ATOM | 3659 | CD  | GLU | B | 45 | -14.536 | 59.350 | 59.804 | 1.00 | 28.67 | C |
| ATOM | 3660 | OE1 | GLU | B | 45 | -15.040 | 60.413 | 60.222 | 1.00 | 29.35 | O |
| ATOM | 3661 | OE2 | GLU | B | 45 | -14.654 | 58.270 | 60.423 | 1.00 | 31.41 | O |
| ATOM | 3662 | N   | HIS | B | 46 | -11.300 | 60.457 | 60.654 | 1.00 | 18.83 | N |
| ATOM | 3663 | CA  | HIS | B | 46 | -10.159 | 59.732 | 61.201 | 1.00 | 18.78 | C |
| ATOM | 3664 | C   | HIS | B | 46 | -10.601 | 58.306 | 61.502 | 1.00 | 18.51 | C |
| ATOM | 3665 | O   | HIS | B | 46 | -10.864 | 57.948 | 62.652 | 1.00 | 18.42 | O |
| ATOM | 3666 | CB  | HIS | B | 46 | -9.667  | 60.427 | 62.468 | 1.00 | 17.76 | C |
| ATOM | 3667 | CG  | HIS | B | 46 | -9.206  | 61.834 | 62.238 | 1.00 | 19.15 | C |
| ATOM | 3668 | ND1 | HIS | B | 46 | -8.143  | 62.142 | 61.416 | 1.00 | 18.66 | N |
| ATOM | 3669 | CD2 | HIS | B | 46 | -9.664  | 63.015 | 62.719 | 1.00 | 17.79 | C |
| ATOM | 3670 | CE1 | HIS | B | 46 | -7.966  | 63.451 | 61.401 | 1.00 | 18.42 | C |
| ATOM | 3671 | NE2 | HIS | B | 46 | -8.874  | 64.004 | 62.184 | 1.00 | 17.45 | N |
| ATOM | 3672 | N   | THR | B | 47 | -10.684 | 57.509 | 60.443 | 1.00 | 17.58 | N |
| ATOM | 3673 | CA  | THR | B | 47 | -11.121 | 56.113 | 60.506 | 1.00 | 17.30 | C |
| ATOM | 3674 | C   | THR | B | 47 | -10.505 | 55.259 | 61.621 | 1.00 | 18.72 | C |
| ATOM | 3675 | O   | THR | B | 47 | -11.223 | 54.681 | 62.445 | 1.00 | 18.87 | O |
| ATOM | 3676 | CB  | THR | B | 47 | -10.852 | 55.421 | 59.152 | 1.00 | 16.64 | C |
| ATOM | 3677 | OG1 | THR | B | 47 | -11.485 | 56.170 | 58.105 | 1.00 | 15.98 | O |
| ATOM | 3678 | CG2 | THR | B | 47 | -11.386 | 53.991 | 59.155 | 1.00 | 15.55 | C |
| ATOM | 3679 | N   | LEU | B | 48 | -9.179  | 55.177 | 61.645 | 1.00 | 17.38 | N |
| ATOM | 3680 | CA  | LEU | B | 48 | -8.499  | 54.370 | 62.645 | 1.00 | 17.41 | C |
| ATOM | 3681 | C   | LEU | B | 48 | -8.698  | 54.866 | 64.070 | 1.00 | 18.37 | C |
| ATOM | 3682 | O   | LEU | B | 48 | -8.746  | 54.057 | 65.002 | 1.00 | 18.03 | O |
| ATOM | 3683 | CB  | LEU | B | 48 | -7.006  | 54.276 | 62.323 | 1.00 | 17.16 | C |
| ATOM | 3684 | CG  | LEU | B | 48 | -6.681  | 53.627 | 60.974 | 1.00 | 16.42 | C |
| ATOM | 3685 | CD1 | LEU | B | 48 | -5.183  | 53.384 | 60.864 | 1.00 | 15.34 | C |
| ATOM | 3686 | CD2 | LEU | B | 48 | -7.435  | 52.326 | 60.848 | 1.00 | 11.34 | C |
| ATOM | 3687 | N   | ALA | B | 49 | -8.815  | 56.182 | 64.244 | 1.00 | 17.09 | N |
| ATOM | 3688 | CA  | ALA | B | 49 | -9.020  | 56.755 | 65.573 | 1.00 | 18.72 | C |
| ATOM | 3689 | C   | ALA | B | 49 | -10.426 | 56.439 | 66.084 | 1.00 | 18.82 | C |
| ATOM | 3690 | O   | ALA | B | 49 | -10.612 | 56.102 | 67.255 | 1.00 | 17.91 | O |
| ATOM | 3691 | CB  | ALA | B | 49 | -8.799  | 58.268 | 65.545 | 1.00 | 15.94 | C |
| ATOM | 3692 | N   | ARG | B | 50 | -11.410 | 56.542 | 65.195 | 1.00 | 20.95 | N |
| ATOM | 3693 | CA  | ARG | B | 50 | -12.803 | 56.265 | 65.542 | 1.00 | 20.82 | C |
| ATOM | 3694 | C   | ARG | B | 50 | -13.016 | 54.792 | 65.899 | 1.00 | 21.26 | C |
| ATOM | 3695 | O   | ARG | B | 50 | -13.513 | 54.462 | 66.976 | 1.00 | 21.27 | O |
| ATOM | 3696 | CB  | ARG | B | 50 | -13.718 | 56.630 | 64.370 | 1.00 | 20.78 | C |
| ATOM | 3697 | CG  | ARG | B | 50 | -15.200 | 56.372 | 64.649 | 1.00 | 21.47 | C |
| ATOM | 3698 | CD  | ARG | B | 50 | -16.044 | 56.683 | 63.435 | 1.00 | 20.91 | C |
| ATOM | 3699 | NE  | ARG | B | 50 | -15.778 | 58.015 | 62.906 | 1.00 | 18.99 | N |
| ATOM | 3700 | CZ  | ARG | B | 50 | -15.965 | 59.142 | 63.584 | 1.00 | 19.16 | C |
| ATOM | 3701 | NH1 | ARG | B | 50 | -16.424 | 59.100 | 64.829 | 1.00 | 20.89 | N |
| ATOM | 3702 | NH2 | ARG | B | 50 | -15.699 | 60.311 | 63.015 | 1.00 | 16.39 | N |
| ATOM | 3703 | N   | ARG | B | 51 | -12.638 | 53.915 | 64.975 | 1.00 | 21.84 | N |
| ATOM | 3704 | CA  | ARG | B | 51 | -12.780 | 52.478 | 65.159 | 1.00 | 21.23 | C |
| ATOM | 3705 | C   | ARG | B | 51 | -12.016 | 52.001 | 66.394 | 1.00 | 22.32 | C |
| ATOM | 3706 | O   | ARG | B | 51 | -12.558 | 51.268 | 67.230 | 1.00 | 22.11 | O |
| ATOM | 3707 | CB  | ARG | B | 51 | -12.272 | 51.756 | 63.910 | 1.00 | 21.20 | C |
| ATOM | 3708 | CG  | ARG | B | 51 | -12.501 | 50.256 | 63.897 | 1.00 | 21.97 | C |
| ATOM | 3709 | CD  | ARG | B | 51 | -12.118 | 49.687 | 62.544 | 1.00 | 22.33 | C |
| ATOM | 3710 | NE  | ARG | B | 51 | -12.468 | 48.277 | 62.409 | 1.00 | 23.74 | N |
| ATOM | 3711 | CZ  | ARG | B | 51 | -11.810 | 47.279 | 62.987 | 1.00 | 24.12 | C |
| ATOM | 3712 | NH1 | ARG | B | 51 | -10.753 | 47.527 | 63.749 | 1.00 | 23.63 | N |
| ATOM | 3713 | NH2 | ARG | B | 51 | -12.210 | 46.032 | 62.799 | 1.00 | 24.56 | N |
| ATOM | 3714 | N   | GLY | B | 52 | -10.760 | 52.424 | 66.510 | 1.00 | 20.82 | N |
| ATOM | 3715 | CA  | GLY | B | 52 | -9.958  | 52.035 | 67.656 | 1.00 | 19.01 | C |
| ATOM | 3716 | C   | GLY | B | 52 | -10.578 | 52.446 | 68.984 | 1.00 | 19.71 | C |
| ATOM | 3717 | O   | GLY | B | 52 | -10.630 | 51.651 | 69.927 | 1.00 | 20.93 | O |
| ATOM | 3718 | N   | ALA | B | 53 | -11.048 | 53.685 | 69.068 | 1.00 | 17.28 | N |
| ATOM | 3719 | CA  | ALA | B | 53 | -11.654 | 54.178 | 70.297 | 1.00 | 19.28 | C |

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ATOM   3720  C   ALA B  53     -12.957  53.436  70.600  1.00 20.67           C
ATOM   3721  O   ALA B  53     -13.292  53.219  71.762  1.00 22.02           O
ATOM   3722  CB  ALA B  53     -11.914  55.680  70.189  1.00 17.42           C
ATOM   3723  N   GLU B  54     -13.690  53.046  69.561  1.00 20.49           N
ATOM   3724  CA  GLU B  54     -14.946  52.327  69.768  1.00 21.71           C
ATOM   3725  C   GLU B  54     -14.667  50.901  70.246  1.00 21.43           C
ATOM   3726  O   GLU B  54     -15.319  50.407  71.167  1.00 19.68           O
ATOM   3727  CB  GLU B  54     -15.774  52.312  68.474  1.00 22.94           C
ATOM   3728  CG  GLU B  54     -16.400  53.663  68.134  1.00 24.46           C
ATOM   3729  CD  GLU B  54     -17.217  53.639  66.850  1.00 28.56           C
ATOM   3730  OE1 GLU B  54     -17.464  52.535  66.315  1.00 31.34           O
ATOM   3731  OE2 GLU B  54     -17.618  54.725  66.379  1.00 28.23           O
ATOM   3732  N   VAL B  55     -13.689  50.247  69.628  1.00 20.93           N
ATOM   3733  CA  VAL B  55     -13.325  48.887  70.014  1.00 21.93           C
ATOM   3734  C   VAL B  55     -12.771  48.871  71.436  1.00 22.60           C
ATOM   3735  O   VAL B  55     -13.087  47.984  72.226  1.00 24.08           O
ATOM   3736  CB  VAL B  55     -12.261  48.293  69.064  1.00 21.53           C
ATOM   3737  CG1 VAL B  55     -11.743  46.969  69.612  1.00 19.69           C
ATOM   3738  CG2 VAL B  55     -12.860  48.089  67.691  1.00 21.46           C
ATOM   3739  N   LEU B  56     -11.947  49.859  71.764  1.00 22.64           N
ATOM   3740  CA  LEU B  56     -11.371  49.927  73.099  1.00 23.16           C
ATOM   3741  C   LEU B  56     -12.477  50.081  74.139  1.00 24.05           C
ATOM   3742  O   LEU B  56     -12.530  49.338  75.121  1.00 22.80           O
ATOM   3743  CB  LEU B  56     -10.396  51.101  73.202  1.00 20.83           C
ATOM   3744  CG  LEU B  56      -9.728  51.273  74.565  1.00 20.87           C
ATOM   3745  CD1 LEU B  56      -9.001  49.994  74.925  1.00 18.07           C
ATOM   3746  CD2 LEU B  56      -8.770  52.459  74.537  1.00 20.50           C
ATOM   3747  N   TRP B  57     -13.367  51.044  73.914  1.00 26.87           N
ATOM   3748  CA  TRP B  57     -14.466  51.289  74.840  1.00 28.32           C
ATOM   3749  C   TRP B  57     -15.255  50.008  75.059  1.00 28.59           C
ATOM   3750  O   TRP B  57     -15.557  49.645  76.191  1.00 29.50           O
ATOM   3751  CB  TRP B  57     -15.390  52.378  74.298  1.00 29.02           C
ATOM   3752  CG  TRP B  57     -16.381  52.863  75.311  1.00 31.25           C
ATOM   3753  CD1 TRP B  57     -17.740  52.721  75.268  1.00 31.05           C
ATOM   3754  CD2 TRP B  57     -16.088  53.551  76.535  1.00 31.13           C
ATOM   3755  NE1 TRP B  57     -18.310  53.278  76.391  1.00 30.62           N
ATOM   3756  CE2 TRP B  57     -17.319  53.793  77.185  1.00 30.53           C
ATOM   3757  CE3 TRP B  57     -14.904  53.986  77.146  1.00 29.93           C
ATOM   3758  CZ2 TRP B  57     -17.401  54.451  78.418  1.00 31.21           C
ATOM   3759  CZ3 TRP B  57     -14.986  54.642  78.371  1.00 30.84           C
ATOM   3760  CH2 TRP B  57     -16.228  54.866  78.993  1.00 30.71           C
ATOM   3761  N   GLU B  58     -15.581  49.323  73.969  1.00 29.22           N
ATOM   3762  CA  GLU B  58     -16.324  48.074  74.058  1.00 31.77           C
ATOM   3763  C   GLU B  58     -15.566  47.020  74.864  1.00 30.33           C
ATOM   3764  O   GLU B  58     -16.102  46.463  75.825  1.00 28.87           O
ATOM   3765  CB  GLU B  58     -16.622  47.521  72.661  1.00 35.07           C
ATOM   3766  CG  GLU B  58     -17.768  48.204  71.940  1.00 40.99           C
ATOM   3767  CD  GLU B  58     -17.993  47.633  70.548  1.00 46.88           C
ATOM   3768  OE1 GLU B  58     -18.031  46.387  70.409  1.00 48.40           O
ATOM   3769  OE2 GLU B  58     -18.140  48.431  69.593  1.00 50.28           O
ATOM   3770  N   GLN B  59     -14.322  46.749  74.480  1.00 29.17           N
ATOM   3771  CA  GLN B  59     -13.536  45.743  75.185  1.00 28.37           C
ATOM   3772  C   GLN B  59     -13.453  46.051  76.676  1.00 27.33           C
ATOM   3773  O   GLN B  59     -13.491  45.143  77.494  1.00 25.98           O
ATOM   3774  CB  GLN B  59     -12.124  45.633  74.594  1.00 27.81           C
ATOM   3775  CG  GLN B  59     -12.089  45.323  73.099  1.00 28.69           C
ATOM   3776  CD  GLN B  59     -10.670  45.141  72.564  1.00 30.16           C
ATOM   3777  OE1 GLN B  59      -9.742  45.839  72.978  1.00 29.60           O
ATOM   3778  NE2 GLN B  59     -10.503  44.209  71.632  1.00 29.45           N
ATOM   3779  N   LEU B  60     -13.351  47.329  77.030  1.00 28.13           N
ATOM   3780  CA  LEU B  60     -13.259  47.711  78.436  1.00 29.44           C
ATOM   3781  C   LEU B  60     -14.499  47.291  79.230  1.00 32.37           C
ATOM   3782  O   LEU B  60     -14.446  47.152  80.454  1.00 32.14           O
ATOM   3783  CB  LEU B  60     -13.047  49.224  78.566  1.00 26.55           C
ATOM   3784  CG  LEU B  60     -11.652  49.760  78.217  1.00 25.81           C
ATOM   3785  CD1 LEU B  60     -11.643  51.265  78.319  1.00 24.44           C
ATOM   3786  CD2 LEU B  60     -10.621  49.178  79.165  1.00 25.75           C
ATOM   3787  N   HIS B  61     -15.610  47.079  78.528  1.00 33.71           N
ATOM   3788  CA  HIS B  61     -16.857  46.684  79.172  1.00 36.02           C
ATOM   3789  C   HIS B  61     -17.171  45.197  79.026  1.00 36.42           C
ATOM   3790  O   HIS B  61     -17.720  44.581  79.944  1.00 36.15           O
ATOM   3791  CB  HIS B  61     -18.020  47.497  78.600  1.00 37.49           C
ATOM   3792  CG  HIS B  61     -18.002  48.940  78.993  1.00 39.74           C
ATOM   3793  ND1 HIS B  61     -18.313  49.369  80.266  1.00 42.16           N
ATOM   3794  CD2 HIS B  61     -17.714  50.054  78.281  1.00 41.68           C
ATOM   3795  CE1 HIS B  61     -18.220  50.686  80.320  1.00 41.96           C
ATOM   3796  NE2 HIS B  61     -17.858  51.127  79.129  1.00 42.75           N
ATOM   3797  N   ASP B  62     -16.819  44.623  77.879  1.00 35.86           N
ATOM   3798  CA  ASP B  62     -17.097  43.217  77.620  1.00 36.19           C
ATOM   3799  C   ASP B  62     -16.079  42.234  78.188  1.00 37.00           C
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| ATOM | 3800 | O | ASP | B | 62 | -16.427 | 41.096 | 78.499 | 1.00 | 37.89 | O |
|------|------|------|------|------|------|---------|---------|---------|------|-------|------|
| ATOM | 3801 | CB | ASP | B | 62 | -17.232 | 42.973 | 76.115 | 1.00 | 37.35 | C |
| ATOM | 3802 | CG | ASP | B | 62 | -18.287 | 43.851 | 75.473 | 1.00 | 39.65 | C |
| ATOM | 3803 | OD1 | ASP | B | 62 | -19.320 | 44.119 | 76.121 | 1.00 | 40.55 | O |
| ATOM | 3804 | OD2 | ASP | B | 62 | -18.092 | 44.262 | 74.310 | 1.00 | 41.68 | O |
| ATOM | 3805 | N | LEU | B | 63 | -14.826 | 42.658 | 78.318 | 1.00 | 35.66 | N |
| ATOM | 3806 | CA | LEU | B | 63 | -13.785 | 41.776 | 78.833 | 1.00 | 34.97 | C |
| ATOM | 3807 | C | LEU | B | 63 | -13.566 | 41.940 | 80.334 | 1.00 | 34.51 | C |
| ATOM | 3808 | O | LEU | B | 63 | -13.848 | 42.995 | 80.902 | 1.00 | 33.61 | O |
| ATOM | 3809 | CB | LEU | B | 63 | -12.467 | 42.026 | 78.091 | 1.00 | 34.80 | C |
| ATOM | 3810 | CG | LEU | B | 63 | -12.481 | 41.887 | 76.565 | 1.00 | 33.43 | C |
| ATOM | 3811 | CD1 | LEU | B | 63 | -11.080 | 42.083 | 76.021 | 1.00 | 33.15 | C |
| ATOM | 3812 | CD2 | LEU | B | 63 | -12.996 | 40.515 | 76.176 | 1.00 | 35.10 | C |
| ATOM | 3813 | N | GLU | B | 64 | -13.064 | 40.885 | 80.969 | 1.00 | 34.06 | N |
| ATOM | 3814 | CA | GLU | B | 64 | -12.794 | 40.913 | 82.403 | 1.00 | 33.13 | C |
| ATOM | 3815 | C | GLU | B | 64 | -11.846 | 42.088 | 82.631 | 1.00 | 31.28 | C |
| ATOM | 3816 | O | GLU | B | 64 | -11.921 | 42.778 | 83.647 | 1.00 | 29.29 | O |
| ATOM | 3817 | CB | GLU | B | 64 | -12.147 | 39.597 | 82.840 | 1.00 | 34.98 | C |
| ATOM | 3818 | CG | GLU | B | 64 | -12.443 | 39.204 | 84.279 | 1.00 | 40.68 | C |
| ATOM | 3819 | CD | GLU | B | 64 | -11.952 | 37.804 | 84.608 | 1.00 | 43.50 | C |
| ATOM | 3820 | OE1 | GLU | B | 64 | -12.201 | 36.882 | 83.798 | 1.00 | 44.88 | O |
| ATOM | 3821 | OE2 | GLU | B | 64 | -11.327 | 37.623 | 85.676 | 1.00 | 46.19 | O |
| ATOM | 3822 | N | TRP | B | 65 | -10.953 | 42.295 | 81.664 | 1.00 | 28.71 | N |
| ATOM | 3823 | CA | TRP | B | 65 | -10.011 | 43.406 | 81.683 | 1.00 | 27.29 | C |
| ATOM | 3824 | C | TRP | B | 65 | -9.182 | 43.407 | 80.406 | 1.00 | 26.93 | C |
| ATOM | 3825 | O | TRP | B | 65 | -9.084 | 42.389 | 79.715 | 1.00 | 27.12 | O |
| ATOM | 3826 | CB | TRP | B | 65 | -9.120 | 43.365 | 82.939 | 1.00 | 25.41 | C |
| ATOM | 3827 | CG | TRP | B | 65 | -7.914 | 42.484 | 82.891 | 1.00 | 25.62 | C |
| ATOM | 3828 | CD1 | TRP | B | 65 | -6.663 | 42.828 | 82.460 | 1.00 | 24.34 | C |
| ATOM | 3829 | CD2 | TRP | B | 65 | -7.821 | 41.130 | 83.353 | 1.00 | 25.54 | C |
| ATOM | 3830 | NE1 | TRP | B | 65 | -5.797 | 41.775 | 82.634 | 1.00 | 26.46 | N |
| ATOM | 3831 | CE2 | TRP | B | 65 | -6.480 | 40.720 | 83.180 | 1.00 | 25.10 | C |
| ATOM | 3832 | CE3 | TRP | B | 65 | -8.742 | 40.223 | 83.898 | 1.00 | 26.53 | C |
| ATOM | 3833 | CZ2 | TRP | B | 65 | -6.035 | 39.443 | 83.534 | 1.00 | 24.45 | C |
| ATOM | 3834 | CZ3 | TRP | B | 65 | -8.298 | 38.948 | 84.253 | 1.00 | 26.71 | C |
| ATOM | 3835 | CH2 | TRP | B | 65 | -6.954 | 38.574 | 84.067 | 1.00 | 26.45 | C |
| ATOM | 3836 | N | VAL | B | 66 | -8.622 | 44.566 | 80.075 | 1.00 | 24.51 | N |
| ATOM | 3837 | CA | VAL | B | 66 | -7.808 | 44.714 | 78.874 | 1.00 | 23.28 | C |
| ATOM | 3838 | C | VAL | B | 66 | -6.355 | 44.924 | 79.265 | 1.00 | 22.56 | C |
| ATOM | 3839 | O | VAL | B | 66 | -6.027 | 45.871 | 79.982 | 1.00 | 22.26 | O |
| ATOM | 3840 | CB | VAL | B | 66 | -8.278 | 45.930 | 78.025 | 1.00 | 23.84 | C |
| ATOM | 3841 | CG1 | VAL | B | 66 | -7.337 | 46.143 | 76.843 | 1.00 | 22.35 | C |
| ATOM | 3842 | CG2 | VAL | B | 66 | -9.700 | 45.701 | 77.528 | 1.00 | 22.48 | C |
| ATOM | 3843 | N | ASN | B | 67 | -5.476 | 44.041 | 78.810 | 1.00 | 22.23 | N |
| ATOM | 3844 | CA | ASN | B | 67 | -4.068 | 44.198 | 79.139 | 1.00 | 22.97 | C |
| ATOM | 3845 | C | ASN | B | 67 | -3.234 | 44.407 | 77.887 | 1.00 | 22.36 | C |
| ATOM | 3846 | O | ASN | B | 67 | -3.644 | 44.042 | 76.788 | 1.00 | 23.81 | O |
| ATOM | 3847 | CB | ASN | B | 67 | -3.555 | 43.000 | 79.956 | 1.00 | 22.73 | C |
| ATOM | 3848 | CG | ASN | B | 67 | -3.684 | 41.680 | 79.224 | 1.00 | 24.90 | C |
| ATOM | 3849 | OD1 | ASN | B | 67 | -4.227 | 41.605 | 78.120 | 1.00 | 24.63 | O |
| ATOM | 3850 | ND2 | ASN | B | 67 | -3.180 | 40.621 | 79.848 | 1.00 | 24.29 | N |
| ATOM | 3851 | N | ALA | B | 68 | -2.064 | 45.010 | 78.052 | 1.00 | 22.54 | N |
| ATOM | 3852 | CA | ALA | B | 68 | -1.200 | 45.286 | 76.918 | 1.00 | 20.17 | C |
| ATOM | 3853 | C | ALA | B | 68 | 0.256 | 45.386 | 77.332 | 1.00 | 20.12 | C |
| ATOM | 3854 | O | ALA | B | 68 | 0.573 | 45.472 | 78.523 | 1.00 | 19.06 | O |
| ATOM | 3855 | CB | ALA | B | 68 | -1.632 | 46.585 | 76.250 | 1.00 | 18.80 | C |
| ATOM | 3856 | N | LEU | B | 69 | 1.128 | 45.376 | 76.326 | 1.00 | 18.09 | N |
| ATOM | 3857 | CA | LEU | B | 69 | 2.570 | 45.483 | 76.503 | 1.00 | 17.03 | C |
| ATOM | 3858 | C | LEU | B | 69 | 3.036 | 46.691 | 75.692 | 1.00 | 17.85 | C |
| ATOM | 3859 | O | LEU | B | 69 | 2.500 | 46.966 | 74.613 | 1.00 | 16.80 | O |
| ATOM | 3860 | CB | LEU | B | 69 | 3.258 | 44.213 | 75.984 | 1.00 | 17.78 | C |
| ATOM | 3861 | CG | LEU | B | 69 | 2.827 | 42.875 | 76.607 | 1.00 | 19.31 | C |
| ATOM | 3862 | CD1 | LEU | B | 69 | 3.502 | 41.697 | 75.885 | 1.00 | 16.77 | C |
| ATOM | 3863 | CD2 | LEU | B | 69 | 3.178 | 42.879 | 78.087 | 1.00 | 17.08 | C |
| ATOM | 3864 | N | GLY | B | 70 | 4.014 | 47.423 | 76.216 | 1.00 | 18.43 | N |
| ATOM | 3865 | CA | GLY | B | 70 | 4.520 | 48.579 | 75.500 | 1.00 | 18.45 | C |
| ATOM | 3866 | C | GLY | B | 70 | 5.214 | 48.170 | 74.208 | 1.00 | 19.25 | C |
| ATOM | 3867 | O | GLY | B | 70 | 6.000 | 47.220 | 74.196 | 1.00 | 19.78 | O |
| ATOM | 3868 | N | ALA | B | 71 | 4.914 | 48.878 | 73.121 | 1.00 | 16.99 | N |
| ATOM | 3869 | CA | ALA | B | 71 | 5.511 | 48.604 | 71.814 | 1.00 | 16.19 | C |
| ATOM | 3870 | C | ALA | B | 71 | 6.194 | 49.864 | 71.275 | 1.00 | 16.30 | C |
| ATOM | 3871 | O | ALA | B | 71 | 5.601 | 50.947 | 71.272 | 1.00 | 13.58 | O |
| ATOM | 3872 | CB | ALA | B | 71 | 4.433 | 48.140 | 70.827 | 1.00 | 13.62 | C |
| ATOM | 3873 | N | LEU | B | 72 | 7.438 | 49.725 | 70.823 | 1.00 | 15.25 | N |
| ATOM | 3874 | CA | LEU | B | 72 | 8.162 | 50.865 | 70.279 | 1.00 | 16.36 | C |
| ATOM | 3875 | C | LEU | B | 72 | 8.432 | 50.736 | 68.776 | 1.00 | 16.23 | C |
| ATOM | 3876 | O | LEU | B | 72 | 9.013 | 51.634 | 68.181 | 1.00 | 16.44 | O |
| ATOM | 3877 | CB | LEU | B | 72 | 9.481 | 51.079 | 71.031 | 1.00 | 17.46 | C |
| ATOM | 3878 | CG | LEU | B | 72 | 10.474 | 49.916 | 70.995 | 1.00 | 18.13 | C |
| ATOM | 3879 | CD1 | LEU | B | 72 | 11.827 | 50.390 | 70.474 | 1.00 | 19.09 | C |

| ATOM | 3880 | CD2 | LEU | B | 72 | 10.599 | 49.332 | 72.385 | 1.00 | 17.85 | C |
|------|------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 3881 | N | THR | B | 73 | 8.048 | 49.611 | 68.173 | 1.00 | 15.71 | N |
| ATOM | 3882 | CA | THR | B | 73 | 8.205 | 49.427 | 66.729 | 1.00 | 15.00 | C |
| ATOM | 3883 | C | THR | B | 73 | 6.947 | 48.749 | 66.175 | 1.00 | 15.84 | C |
| ATOM | 3884 | O | THR | B | 73 | 6.174 | 48.139 | 66.919 | 1.00 | 13.25 | O |
| ATOM | 3885 | CB | THR | B | 73 | 9.420 | 48.544 | 66.338 | 1.00 | 13.91 | C |
| ATOM | 3886 | OG1 | THR | B | 73 | 9.097 | 47.168 | 66.540 | 1.00 | 17.86 | O |
| ATOM | 3887 | CG2 | THR | B | 73 | 10.639 | 48.896 | 67.158 | 1.00 | 16.60 | C |
| ATOM | 3888 | N | GLY | B | 74 | 6.748 | 48.859 | 64.866 | 1.00 | 16.36 | N |
| ATOM | 3889 | CA | GLY | B | 74 | 5.590 | 48.251 | 64.247 | 1.00 | 15.24 | C |
| ATOM | 3890 | C | GLY | B | 74 | 5.529 | 46.748 | 64.447 | 1.00 | 14.57 | C |
| ATOM | 3891 | O | GLY | B | 74 | 4.489 | 46.219 | 64.852 | 1.00 | 15.34 | O |
| ATOM | 3892 | N | ASN | B | 75 | 6.632 | 46.056 | 64.168 | 1.00 | 13.36 | N |
| ATOM | 3893 | CA | ASN | B | 75 | 6.664 | 44.601 | 64.324 | 1.00 | 15.24 | C |
| ATOM | 3894 | C | ASN | B | 75 | 6.313 | 44.152 | 65.746 | 1.00 | 15.70 | C |
| ATOM | 3895 | O | ASN | B | 75 | 5.717 | 43.090 | 65.931 | 1.00 | 15.49 | O |
| ATOM | 3896 | CB | ASN | B | 75 | 8.037 | 44.036 | 63.948 | 1.00 | 14.42 | C |
| ATOM | 3897 | CG | ASN | B | 75 | 8.365 | 44.201 | 62.479 | 1.00 | 18.37 | C |
| ATOM | 3898 | OD1 | ASN | B | 75 | 7.564 | 44.738 | 61.692 | 1.00 | 18.10 | O |
| ATOM | 3899 | ND2 | ASN | B | 75 | 9.554 | 43.742 | 62.094 | 1.00 | 14.29 | N |
| ATOM | 3900 | N | MET | B | 76 | 6.697 | 44.940 | 66.749 | 1.00 | 15.50 | N |
| ATOM | 3901 | CA | MET | B | 76 | 6.391 | 44.580 | 68.134 | 1.00 | 16.67 | C |
| ATOM | 3902 | C | MET | B | 76 | 4.887 | 44.475 | 68.319 | 1.00 | 16.66 | C |
| ATOM | 3903 | O | MET | B | 76 | 4.389 | 43.514 | 68.890 | 1.00 | 16.15 | O |
| ATOM | 3904 | CB | MET | B | 76 | 6.937 | 45.619 | 69.123 | 1.00 | 15.33 | C |
| ATOM | 3905 | CG | MET | B | 76 | 8.420 | 45.516 | 69.403 | 1.00 | 15.25 | C |
| ATOM | 3906 | SD | MET | B | 76 | 8.904 | 46.432 | 70.881 | 1.00 | 14.57 | S |
| ATOM | 3907 | CE | MET | B | 76 | 10.675 | 46.146 | 70.848 | 1.00 | 9.99 | C |
| ATOM | 3908 | N | ALA | B | 77 | 4.168 | 45.475 | 67.823 | 1.00 | 15.78 | N |
| ATOM | 3909 | CA | ALA | B | 77 | 2.720 | 45.483 | 67.941 | 1.00 | 18.11 | C |
| ATOM | 3910 | C | ALA | B | 77 | 2.113 | 44.297 | 67.197 | 1.00 | 16.32 | C |
| ATOM | 3911 | O | ALA | B | 77 | 1.147 | 43.703 | 67.660 | 1.00 | 17.29 | O |
| ATOM | 3912 | CB | ALA | B | 77 | 2.156 | 46.797 | 67.399 | 1.00 | 15.82 | C |
| ATOM | 3913 | N | VAL | B | 78 | 2.683 | 43.956 | 66.045 | 1.00 | 16.84 | N |
| ATOM | 3914 | CA | VAL | B | 78 | 2.175 | 42.840 | 65.253 | 1.00 | 17.19 | C |
| ATOM | 3915 | C | VAL | B | 78 | 2.298 | 41.527 | 66.018 | 1.00 | 17.92 | C |
| ATOM | 3916 | O | VAL | B | 78 | 1.366 | 40.727 | 66.029 | 1.00 | 16.91 | O |
| ATOM | 3917 | CB | VAL | B | 78 | 2.919 | 42.717 | 63.909 | 1.00 | 15.66 | C |
| ATOM | 3918 | CG1 | VAL | B | 78 | 2.527 | 41.430 | 63.203 | 1.00 | 13.24 | C |
| ATOM | 3919 | CG2 | VAL | B | 78 | 2.581 | 43.907 | 63.023 | 1.00 | 16.91 | C |
| ATOM | 3920 | N | GLN | B | 79 | 3.442 | 41.316 | 66.661 | 1.00 | 16.26 | N |
| ATOM | 3921 | CA | GLN | B | 79 | 3.658 | 40.101 | 67.428 | 1.00 | 17.31 | C |
| ATOM | 3922 | C | GLN | B | 79 | 2.716 | 40.051 | 68.618 | 1.00 | 19.50 | C |
| ATOM | 3923 | O | GLN | B | 79 | 2.238 | 38.983 | 68.996 | 1.00 | 20.14 | O |
| ATOM | 3924 | CB | GLN | B | 79 | 5.111 | 40.012 | 67.911 | 1.00 | 16.95 | C |
| ATOM | 3925 | CG | GLN | B | 79 | 6.119 | 39.773 | 66.791 | 1.00 | 15.63 | C |
| ATOM | 3926 | CD | GLN | B | 79 | 5.667 | 38.676 | 65.833 | 1.00 | 19.56 | C |
| ATOM | 3927 | OE1 | GLN | B | 79 | 5.033 | 37.695 | 66.240 | 1.00 | 17.31 | O |
| ATOM | 3928 | NE2 | GLN | B | 79 | 6.000 | 38.833 | 64.557 | 1.00 | 18.31 | N |
| ATOM | 3929 | N | GLN | B | 80 | 2.454 | 41.212 | 69.211 | 1.00 | 19.17 | N |
| ATOM | 3930 | CA | GLN | B | 80 | 1.560 | 41.293 | 70.347 | 1.00 | 19.28 | C |
| ATOM | 3931 | C | GLN | B | 80 | 0.149 | 40.843 | 69.948 | 1.00 | 21.24 | C |
| ATOM | 3932 | O | GLN | B | 80 | -0.476 | 40.045 | 70.647 | 1.00 | 22.35 | O |
| ATOM | 3933 | CB | GLN | B | 80 | 1.560 | 42.725 | 70.900 | 1.00 | 19.08 | C |
| ATOM | 3934 | CG | GLN | B | 80 | 2.856 | 43.077 | 71.629 | 1.00 | 15.58 | C |
| ATOM | 3935 | CD | GLN | B | 80 | 2.983 | 44.556 | 71.952 | 1.00 | 16.28 | C |
| ATOM | 3936 | OE1 | GLN | B | 80 | 2.051 | 45.337 | 71.750 | 1.00 | 13.22 | O |
| ATOM | 3937 | NE2 | GLN | B | 80 | 4.149 | 44.948 | 72.460 | 1.00 | 14.95 | N |
| ATOM | 3938 | N | VAL | B | 81 | -0.347 | 41.335 | 68.817 | 1.00 | 20.72 | N |
| ATOM | 3939 | CA | VAL | B | 81 | -1.677 | 40.952 | 68.352 | 1.00 | 20.47 | C |
| ATOM | 3940 | C | VAL | B | 81 | -1.694 | 39.495 | 67.883 | 1.00 | 21.39 | C |
| ATOM | 3941 | O | VAL | B | 81 | -2.650 | 38.755 | 68.150 | 1.00 | 21.91 | O |
| ATOM | 3942 | CB | VAL | B | 81 | -2.156 | 41.881 | 67.208 | 1.00 | 19.54 | C |
| ATOM | 3943 | CG1 | VAL | B | 81 | -3.475 | 41.389 | 66.640 | 1.00 | 20.01 | C |
| ATOM | 3944 | CG2 | VAL | B | 81 | -2.319 | 43.291 | 67.740 | 1.00 | 15.95 | C |
| ATOM | 3945 | N | ARG | B | 82 | -0.632 | 39.082 | 67.199 | 1.00 | 19.99 | N |
| ATOM | 3946 | CA | ARG | B | 82 | -0.520 | 37.714 | 66.712 | 1.00 | 22.68 | C |
| ATOM | 3947 | C | ARG | B | 82 | -0.547 | 36.729 | 67.892 | 1.00 | 23.96 | C |
| ATOM | 3948 | O | ARG | B | 82 | -1.003 | 35.595 | 67.752 | 1.00 | 24.16 | O |
| ATOM | 3949 | CB | ARG | B | 82 | 0.783 | 37.540 | 65.918 | 1.00 | 22.05 | C |
| ATOM | 3950 | CG | ARG | B | 82 | 1.141 | 36.089 | 65.600 | 1.00 | 24.69 | C |
| ATOM | 3951 | CD | ARG | B | 82 | 0.244 | 35.489 | 64.523 | 1.00 | 25.69 | C |
| ATOM | 3952 | NE | ARG | B | 82 | 0.570 | 35.998 | 63.192 | 1.00 | 29.30 | N |
| ATOM | 3953 | CZ | ARG | B | 82 | -0.088 | 35.671 | 62.081 | 1.00 | 32.22 | C |
| ATOM | 3954 | NH1 | ARG | B | 82 | -1.116 | 34.831 | 62.139 | 1.00 | 30.85 | N |
| ATOM | 3955 | NH2 | ARG | B | 82 | 0.281 | 36.185 | 60.910 | 1.00 | 30.16 | N |
| ATOM | 3956 | N | ALA | B | 83 | -0.058 | 37.174 | 69.049 | 1.00 | 24.26 | N |
| ATOM | 3957 | CA | ALA | B | 83 | -0.026 | 36.344 | 70.250 | 1.00 | 22.70 | C |
| ATOM | 3958 | C | ALA | B | 83 | -1.357 | 36.376 | 70.992 | 1.00 | 22.73 | C |
| ATOM | 3959 | O | ALA | B | 83 | -1.523 | 35.701 | 72.005 | 1.00 | 23.47 | O |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 3960 | CB | ALA | B | 83 | 1.094 | 36.795 | 71.173 | 1.00 | 21.01 | C |
| ATOM | 3961 | N | GLY | B | 84 | -2.299 | 37.174 | 70.496 | 1.00 | 23.53 | N |
| ATOM | 3962 | CA | GLY | B | 84 | -3.609 | 37.239 | 71.123 | 1.00 | 22.32 | C |
| ATOM | 3963 | C | GLY | B | 84 | -3.966 | 38.472 | 71.932 | 1.00 | 22.68 | C |
| ATOM | 3964 | O | GLY | B | 84 | -5.082 | 38.562 | 72.435 | 1.00 | 23.18 | O |
| ATOM | 3965 | N | LEU | B | 85 | -3.053 | 39.424 | 72.081 | 1.00 | 22.94 | N |
| ATOM | 3966 | CA | LEU | B | 85 | -3.385 | 40.614 | 72.858 | 1.00 | 22.27 | C |
| ATOM | 3967 | C | LEU | B | 85 | -4.400 | 41.450 | 72.084 | 1.00 | 23.18 | C |
| ATOM | 3968 | O | LEU | B | 85 | -4.417 | 41.436 | 70.849 | 1.00 | 23.16 | O |
| ATOM | 3969 | CB | LEU | B | 85 | -2.114 | 41.410 | 73.183 | 1.00 | 20.83 | C |
| ATOM | 3970 | CG | LEU | B | 85 | -1.095 | 40.610 | 74.020 | 1.00 | 20.86 | C |
| ATOM | 3971 | CD1 | LEU | B | 85 | 0.091 | 41.475 | 74.379 | 1.00 | 15.26 | C |
| ATOM | 3972 | CD2 | LEU | B | 85 | -1.763 | 40.076 | 75.289 | 1.00 | 19.36 | C |
| ATOM | 3973 | N | LYS | B | 86 | -5.261 | 42.164 | 72.803 | 1.00 | 23.67 | N |
| ATOM | 3974 | CA | LYS | B | 86 | -6.290 | 42.958 | 72.144 | 1.00 | 24.39 | C |
| ATOM | 3975 | C | LYS | B | 86 | -6.151 | 44.473 | 72.268 | 1.00 | 23.34 | C |
| ATOM | 3976 | O | LYS | B | 86 | -7.067 | 45.221 | 71.935 | 1.00 | 22.67 | O |
| ATOM | 3977 | CB | LYS | B | 86 | -7.668 | 42.506 | 72.626 | 1.00 | 26.28 | C |
| ATOM | 3978 | CG | LYS | B | 86 | -8.022 | 41.112 | 72.147 | 1.00 | 29.37 | C |
| ATOM | 3979 | CD | LYS | B | 86 | -9.450 | 40.749 | 72.490 | 1.00 | 33.77 | C |
| ATOM | 3980 | CE | LYS | B | 86 | -9.760 | 39.318 | 72.071 | 1.00 | 36.03 | C |
| ATOM | 3981 | NZ | LYS | B | 86 | -11.133 | 38.902 | 72.477 | 1.00 | 36.58 | N |
| ATOM | 3982 | N | ALA | B | 87 | -4.995 | 44.916 | 72.737 | 1.00 | 21.21 | N |
| ATOM | 3983 | CA | ALA | B | 87 | -4.713 | 46.335 | 72.868 | 1.00 | 20.59 | C |
| ATOM | 3984 | C | ALA | B | 87 | -3.209 | 46.532 | 72.788 | 1.00 | 19.56 | C |
| ATOM | 3985 | O | ALA | B | 87 | -2.436 | 45.606 | 73.048 | 1.00 | 17.26 | O |
| ATOM | 3986 | CB | ALA | B | 87 | -5.244 | 46.871 | 74.194 | 1.00 | 18.76 | C |
| ATOM | 3987 | N | ILE | B | 88 | -2.800 | 47.740 | 72.415 | 1.00 | 19.40 | N |
| ATOM | 3988 | CA | ILE | B | 88 | -1.389 | 48.062 | 72.317 | 1.00 | 18.53 | C |
| ATOM | 3989 | C | ILE | B | 88 | -1.083 | 49.286 | 73.168 | 1.00 | 20.38 | C |
| ATOM | 3990 | O | ILE | B | 88 | -1.783 | 50.297 | 73.093 | 1.00 | 20.41 | O |
| ATOM | 3991 | CB | ILE | B | 88 | -0.988 | 48.360 | 70.870 | 1.00 | 20.53 | C |
| ATOM | 3992 | CG1 | ILE | B | 88 | -1.264 | 47.135 | 69.999 | 1.00 | 22.74 | C |
| ATOM | 3993 | CG2 | ILE | B | 88 | 0.488 | 48.730 | 70.803 | 1.00 | 16.71 | C |
| ATOM | 3994 | CD1 | ILE | B | 88 | -0.991 | 47.369 | 68.549 | 1.00 | 27.02 | C |
| ATOM | 3995 | N | TYR | B | 89 | -0.044 | 49.195 | 73.987 | 1.00 | 19.34 | N |
| ATOM | 3996 | CA | TYR | B | 89 | 0.335 | 50.326 | 74.815 | 1.00 | 19.33 | C |
| ATOM | 3997 | C | TYR | B | 89 | 1.544 | 51.001 | 74.191 | 1.00 | 18.86 | C |
| ATOM | 3998 | O | TYR | B | 89 | 2.547 | 50.349 | 73.900 | 1.00 | 19.73 | O |
| ATOM | 3999 | CB | TYR | B | 89 | 0.684 | 49.886 | 76.238 | 1.00 | 18.81 | C |
| ATOM | 4000 | CG | TYR | B | 89 | 1.128 | 51.053 | 77.075 | 1.00 | 17.90 | C |
| ATOM | 4001 | CD1 | TYR | B | 89 | 0.250 | 52.100 | 77.346 | 1.00 | 17.98 | C |
| ATOM | 4002 | CD2 | TYR | B | 89 | 2.445 | 51.158 | 77.526 | 1.00 | 17.34 | C |
| ATOM | 4003 | CE1 | TYR | B | 89 | 0.667 | 53.225 | 78.032 | 1.00 | 17.30 | C |
| ATOM | 4004 | CE2 | TYR | B | 89 | 2.875 | 52.281 | 78.216 | 1.00 | 16.31 | C |
| ATOM | 4005 | CZ | TYR | B | 89 | 1.979 | 53.311 | 78.461 | 1.00 | 17.28 | C |
| ATOM | 4006 | OH | TYR | B | 89 | 2.387 | 54.452 | 79.100 | 1.00 | 17.17 | O |
| ATOM | 4007 | N | LEU | B | 90 | 1.449 | 52.306 | 73.987 | 1.00 | 17.05 | N |
| ATOM | 4008 | CA | LEU | B | 90 | 2.545 | 53.049 | 73.390 | 1.00 | 19.55 | C |
| ATOM | 4009 | C | LEU | B | 90 | 3.214 | 53.895 | 74.466 | 1.00 | 19.96 | C |
| ATOM | 4010 | O | LEU | B | 90 | 2.736 | 54.968 | 74.829 | 1.00 | 21.40 | O |
| ATOM | 4011 | CB | LEU | B | 90 | 2.015 | 53.909 | 72.240 | 1.00 | 19.27 | C |
| ATOM | 4012 | CG | LEU | B | 90 | 2.920 | 54.871 | 71.464 | 1.00 | 20.67 | C |
| ATOM | 4013 | CD1 | LEU | B | 90 | 4.389 | 54.543 | 71.618 | 1.00 | 18.33 | C |
| ATOM | 4014 | CD2 | LEU | B | 90 | 2.492 | 54.825 | 70.009 | 1.00 | 17.93 | C |
| ATOM | 4015 | N | SER | B | 91 | 4.328 | 53.383 | 74.973 | 1.00 | 18.22 | N |
| ATOM | 4016 | CA | SER | B | 91 | 5.083 | 54.033 | 76.035 | 1.00 | 17.81 | C |
| ATOM | 4017 | C | SER | B | 91 | 5.881 | 55.257 | 75.618 | 1.00 | 16.24 | C |
| ATOM | 4018 | O | SER | B | 91 | 6.545 | 55.254 | 74.585 | 1.00 | 16.23 | O |
| ATOM | 4019 | CB | SER | B | 91 | 6.036 | 53.017 | 76.666 | 1.00 | 17.64 | C |
| ATOM | 4020 | OG | SER | B | 91 | 6.947 | 53.660 | 77.526 | 1.00 | 17.50 | O |
| ATOM | 4021 | N | GLY | B | 92 | 5.817 | 56.300 | 76.437 | 1.00 | 15.93 | N |
| ATOM | 4022 | CA | GLY | B | 92 | 6.569 | 57.505 | 76.155 | 1.00 | 17.22 | C |
| ATOM | 4023 | C | GLY | B | 92 | 8.006 | 57.250 | 76.569 | 1.00 | 17.91 | C |
| ATOM | 4024 | O | GLY | B | 92 | 8.946 | 57.715 | 75.919 | 1.00 | 18.40 | O |
| ATOM | 4025 | N | TRP | B | 93 | 8.163 | 56.488 | 77.651 | 1.00 | 17.46 | N |
| ATOM | 4026 | CA | TRP | B | 93 | 9.471 | 56.123 | 78.182 | 1.00 | 17.48 | C |
| ATOM | 4027 | C | TRP | B | 93 | 10.283 | 55.428 | 77.086 | 1.00 | 18.90 | C |
| ATOM | 4028 | O | TRP | B | 93 | 11.448 | 55.768 | 76.856 | 1.00 | 18.02 | O |
| ATOM | 4029 | CB | TRP | B | 93 | 9.303 | 55.173 | 79.385 | 1.00 | 18.32 | C |
| ATOM | 4030 | CG | TRP | B | 93 | 10.566 | 54.919 | 80.187 | 1.00 | 18.32 | C |
| ATOM | 4031 | CD1 | TRP | B | 93 | 10.865 | 55.421 | 81.426 | 1.00 | 19.09 | C |
| ATOM | 4032 | CD2 | TRP | B | 93 | 11.704 | 54.133 | 79.791 | 1.00 | 17.73 | C |
| ATOM | 4033 | NE1 | TRP | B | 93 | 12.114 | 55.000 | 81.823 | 1.00 | 20.68 | N |
| ATOM | 4034 | CE2 | TRP | B | 93 | 12.651 | 54.209 | 80.841 | 1.00 | 18.45 | C |
| ATOM | 4035 | CE3 | TRP | B | 93 | 12.015 | 53.374 | 78.655 | 1.00 | 17.01 | C |
| ATOM | 4036 | CZ2 | TRP | B | 93 | 13.888 | 53.553 | 80.787 | 1.00 | 17.21 | C |
| ATOM | 4037 | CZ3 | TRP | B | 93 | 13.247 | 52.718 | 78.601 | 1.00 | 16.77 | C |
| ATOM | 4038 | CH2 | TRP | B | 93 | 14.167 | 52.815 | 79.666 | 1.00 | 17.59 | C |
| ATOM | 4039 | N | GLN | B | 94 | 9.664 | 54.454 | 76.413 | 1.00 | 18.25 | N |

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ATOM   4040  CA  GLN B  94      10.334  53.704  75.348  1.00 18.00           C
ATOM   4041  C   GLN B  94      10.672  54.578  74.139  1.00 16.49           C
ATOM   4042  O   GLN B  94      11.695  54.389  73.485  1.00 15.08           O
ATOM   4043  CB  GLN B  94       9.471  52.513  74.907  1.00 18.89           C
ATOM   4044  CG  GLN B  94       9.227  51.469  76.004  1.00 17.64           C
ATOM   4045  CD  GLN B  94       8.513  50.219  75.495  1.00 19.10           C
ATOM   4046  OE1 GLN B  94       7.607  50.299  74.650  1.00 19.52           O
ATOM   4047  NE2 GLN B  94       8.902  49.061  76.022  1.00 12.76           N
ATOM   4048  N   VAL B  95       9.799  55.530  73.838  1.00 18.26           N
ATOM   4049  CA  VAL B  95      10.027  56.440  72.720  1.00 16.73           C
ATOM   4050  C   VAL B  95      11.248  57.302  73.036  1.00 16.06           C
ATOM   4051  O   VAL B  95      12.095  57.535  72.182  1.00 19.84           O
ATOM   4052  CB  VAL B  95       8.787  57.338  72.483  1.00 16.66           C
ATOM   4053  CG1 VAL B  95       9.115  58.462  71.492  1.00 14.98           C
ATOM   4054  CG2 VAL B  95       7.638  56.487  71.953  1.00 13.21           C
ATOM   4055  N   ALA B  96      11.333  57.764  74.276  1.00 14.86           N
ATOM   4056  CA  ALA B  96      12.455  58.580  74.716  1.00 15.71           C
ATOM   4057  C   ALA B  96      13.761  57.794  74.605  1.00 15.26           C
ATOM   4058  O   ALA B  96      14.774  58.298  74.116  1.00 16.12           O
ATOM   4059  CB  ALA B  96      12.236  59.024  76.171  1.00 13.87           C
ATOM   4060  N   GLY B  97      13.728  56.546  75.049  1.00 14.92           N
ATOM   4061  CA  GLY B  97      14.925  55.733  75.009  1.00 15.35           C
ATOM   4062  C   GLY B  97      15.343  55.100  73.690  1.00 16.19           C
ATOM   4063  O   GLY B  97      16.534  54.855  73.494  1.00 17.18           O
ATOM   4064  N   ASP B  98      14.416  54.850  72.772  1.00 13.97           N
ATOM   4065  CA  ASP B  98      14.825  54.183  71.537  1.00 16.09           C
ATOM   4066  C   ASP B  98      13.955  54.428  70.293  1.00 17.36           C
ATOM   4067  O   ASP B  98      14.122  53.734  69.290  1.00 18.03           O
ATOM   4068  CB  ASP B  98      14.918  52.673  71.830  1.00 16.27           C
ATOM   4069  CG  ASP B  98      15.814  51.922  70.859  1.00 17.11           C
ATOM   4070  OD1 ASP B  98      16.856  52.473  70.442  1.00 17.31           O
ATOM   4071  OD2 ASP B  98      15.488  50.758  70.537  1.00 16.45           O
ATOM   4072  N   ALA B  99      13.044  55.406  70.332  1.00 18.03           N
ATOM   4073  CA  ALA B  99      12.193  55.652  69.160  1.00 17.83           C .
ATOM   4074  C   ALA B  99      11.598  57.060  69.004  1.00 18.31           C
ATOM   4075  O   ALA B  99      10.404  57.195  68.710  1.00 17.34           O
ATOM   4076  CB  ALA B  99      11.057  54.610  69.126  1.00 14.67           C
ATOM   4077  N   ASN B 100      12.410  58.105  69.177  1.00 17.21           N
ATOM   4078  CA  ASN B 100      11.898  59.464  69.037  1.00 17.81           C
ATOM   4079  C   ASN B 100      12.586  60.220  67.893  1.00 17.34           C
ATOM   4080  O   ASN B 100      13.720  59.916  67.522  1.00 16.01           O
ATOM   4081  CB  ASN B 100      12.044  60.236  70.356  1.00 18.02           C
ATOM   4082  CG  ASN B 100      13.484  60.527  70.697  1.00 18.44           C
ATOM   4083  OD1 ASN B 100      14.110  59.822  71.499  1.00 17.40           O
ATOM   4084  ND2 ASN B 100      14.031  61.561  70.073  1.00 16.20           N
ATOM   4085  N   LEU B 101      11.885  61.212  67.353  1.00 16.12           N
ATOM   4086  CA  LEU B 101      12.353  62.008  66.217  1.00 14.52           C
ATOM   4087  C   LEU B 101      13.652  62.802  66.347  1.00 13.77           C
ATOM   4088  O   LEU B 101      14.088  63.420  65.380  1.00 14.43           O
ATOM   4089  CB  LEU B 101      11.238  62.956  65.778  1.00 15.53           C
ATOM   4090  CG  LEU B 101       9.926  62.263  65.397  1.00 18.80           C
ATOM   4091  CD1 LEU B 101       8.851  63.306  65.104  1.00 20.08           C
ATOM   4092  CD2 LEU B 101      10.153  61.364  64.182  1.00 19.77           C
ATOM   4093  N   SER B 102      14.273  62.812  67.517  1.00 13.63           N
ATOM   4094  CA  SER B 102      15.519  63.559  67.655  1.00 15.02           C
ATOM   4095  C   SER B 102      16.673  62.640  67.296  1.00 14.18           C
ATOM   4096  O   SER B 102      17.769  63.096  67.012  1.00 15.64           O
ATOM   4097  CB  SER B 102      15.719  64.062  69.088  1.00 13.78           C
ATOM   4098  OG  SER B 102      16.234  63.023  69.900  1.00 17.53           O
ATOM   4099  N   GLY B 103      16.411  61.339  67.316  1.00 15.85           N
ATOM   4100  CA  GLY B 103      17.442  60.370  67.012  1.00 15.07           C
ATOM   4101  C   GLY B 103      18.286  60.034  68.231  1.00 16.04           C
ATOM   4102  O   GLY B 103      19.135  59.157  68.169  1.00 18.08           O
ATOM   4103  N   HIS B 104      18.049  60.719  69.348  1.00 17.24           N
ATOM   4104  CA  HIS B 104      18.821  60.483  70.564  1.00 15.86           C
ATOM   4105  C   HIS B 104      18.172  59.579  71.601  1.00 15.11           C
ATOM   4106  O   HIS B 104      16.954  59.416  71.629  1.00 15.25           O
ATOM   4107  CB  HIS B 104      19.163  61.817  71.232  1.00 17.10           C
ATOM   4108  CG  HIS B 104      20.248  62.579  70.539  1.00 19.42           C
ATOM   4109  ND1 HIS B 104      20.044  63.823  69.979  1.00 20.17           N
ATOM   4110  CD2 HIS B 104      21.544  62.265  70.302  1.00 18.73           C
ATOM   4111  CE1 HIS B 104      21.169  64.240  69.423  1.00 20.65           C
ATOM   4112  NE2 HIS B 104      22.094  63.313  69.605  1.00 21.98           N
ATOM   4113  N   THR B 105      19.006  58.993  72.455  1.00 14.90           N
ATOM   4114  CA  THR B 105      18.529  58.139  73.543  1.00 16.72           C
ATOM   4115  C   THR B 105      18.339  59.074  74.738  1.00 17.21           C
ATOM   4116  O   THR B 105      19.288  59.735  75.165  1.00 18.45           O
ATOM   4117  CB  THR B 105      19.568  57.058  73.920  1.00 16.14           C
ATOM   4118  OG1 THR B 105      19.780  56.181  72.810  1.00 15.74           O
ATOM   4119  CG2 THR B 105      19.082  56.238  75.096  1.00 17.77           C
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ATOM   4120   N    TYR B 106     17.125  59.139  75.274  1.00  15.64          N
ATOM   4121   CA   TYR B 106     16.847  60.029  76.403  1.00  14.87          C
ATOM   4122   C    TYR B 106     16.170  59.350  77.575  1.00  15.92          C
ATOM   4123   O    TYR B 106     15.487  58.341  77.409  1.00  17.15          O
ATOM   4124   CB   TYR B 106     15.887  61.149  75.997  1.00  14.14          C
ATOM   4125   CG   TYR B 106     16.386  62.171  75.008  1.00  15.34          C
ATOM   4126   CD1  TYR B 106     17.576  62.873  75.224  1.00  15.03          C
ATOM   4127   CD2  TYR B 106     15.607  62.519  73.904  1.00  15.54          C
ATOM   4128   CE1  TYR B 106     17.967  63.905  74.362  1.00  16.61          C
ATOM   4129   CE2  TYR B 106     15.984  63.542  73.046  1.00  14.70          C
ATOM   4130   CZ   TYR B 106     17.162  64.233  73.280  1.00  15.29          C
ATOM   4131   OH   TYR B 106     17.516  65.255  72.427  1.00  15.34          O
ATOM   4132   N    PRO B 107     16.368  59.891  78.788  1.00  16.81          N
ATOM   4133   CA   PRO B 107     15.714  59.311  79.961  1.00  16.64          C
ATOM   4134   C    PRO B 107     14.277  59.844  79.828  1.00  17.71          C
ATOM   4135   O    PRO B 107     14.023  60.739  79.012  1.00  16.17          O
ATOM   4136   CB   PRO B 107     16.487  59.927  81.133  1.00  15.90          C
ATOM   4137   CG   PRO B 107     16.921  61.263  80.586  1.00  16.07          C
ATOM   4138   CD   PRO B 107     17.388  60.874  79.198  1.00  17.50          C
ATOM   4139   N    ASP B 108     13.348  59.318  80.617  1.00  19.40          N
ATOM   4140   CA   ASP B 108     11.945  59.716  80.524  1.00  18.33          C
ATOM   4141   C    ASP B 108     11.633  61.079  81.150  1.00  19.21          C
ATOM   4142   O    ASP B 108     11.062  61.151  82.241  1.00  18.70          O
ATOM   4143   CB   ASP B 108     11.097  58.617  81.163  1.00  20.37          C
ATOM   4144   CG   ASP B 108      9.611  58.781  80.902  1.00  21.65          C
ATOM   4145   OD1  ASP B 108      9.234  59.312  79.840  1.00  22.92          O
ATOM   4146   OD2  ASP B 108      8.818  58.353  81.761  1.00  22.40          O
ATOM   4147   N    GLN B 109     11.982  62.158  80.445  1.00  16.94          N
ATOM   4148   CA   GLN B 109     11.755  63.499  80.967  1.00  17.87          C
ATOM   4149   C    GLN B 109     11.248  64.522  79.941  1.00  19.18          C
ATOM   4150   O    GLN B 109     11.628  65.692  79.982  1.00  18.95          O
ATOM   4151   CB   GLN B 109     13.047  64.015  81.622  1.00  18.28          C
ATOM   4152   CG   GLN B 109     13.541  63.156  82.792  1.00  21.24          C
ATOM   4153   CD   GLN B 109     14.854  63.650  83.383  1.00  22.86          C
ATOM   4154   OE1  GLN B 109     14.965  64.805  83.807  1.00  24.21          O
ATOM   4155   NE2  GLN B 109     15.854  62.776  83.415  1.00  21.82          N
ATOM   4156   N    SER B 110     10.378  64.087  79.035  1.00  19.06          N
ATOM   4157   CA   SER B 110      9.832  64.981  78.019  1.00  18.79          C
ATOM   4158   C    SER B 110     10.916  65.754  77.273  1.00  16.09          C
ATOM   4159   O    SER B 110     10.777  66.949  77.025  1.00  16.96          O
ATOM   4160   CB   SER B 110      8.859  65.977  78.660  1.00  19.83          C
ATOM   4161   OG   SER B 110      7.721  65.319  79.177  1.00  20.89          O
ATOM   4162   N    LEU B 111     11.989  65.072  76.904  1.00  15.87          N
ATOM   4163   CA   LEU B 111     13.080  65.725  76.193  1.00  16.87          C
ATOM   4164   C    LEU B 111     12.923  65.679  74.674  1.00  16.21          C
ATOM   4165   O    LEU B 111     13.405  66.565  73.976  1.00  16.08          O
ATOM   4166   CB   LEU B 111     14.411  65.080  76.587  1.00  16.55          C
ATOM   4167   CG   LEU B 111     14.761  65.167  78.071  1.00  15.69          C
ATOM   4168   CD1  LEU B 111     15.985  64.316  78.375  1.00  15.89          C
ATOM   4169   CD2  LEU B 111     15.018  66.630  78.431  1.00  17.98          C
ATOM   4170   N    TYR B 112     12.240  64.656  74.168  1.00  15.78          N
ATOM   4171   CA   TYR B 112     12.066  64.492  72.722  1.00  15.87          C
ATOM   4172   C    TYR B 112     11.006  65.394  72.074  1.00  15.33          C
ATOM   4173   O    TYR B 112     10.157  65.971  72.759  1.00  15.23          O
ATOM   4174   CB   TYR B 112     11.778  63.014  72.410  1.00  14.91          C
ATOM   4175   CG   TYR B 112     10.515  62.460  73.044  1.00  16.74          C
ATOM   4176   CD1  TYR B 112      9.262  62.813  72.557  1.00  13.55          C
ATOM   4177   CD2  TYR B 112     10.580  61.577  74.134  1.00  17.44          C
ATOM   4178   CE1  TYR B 112      8.095  62.309  73.128  1.00  16.31          C
ATOM   4179   CE2  TYR B 112      9.416  61.064  74.719  1.00  18.43          C
ATOM   4180   CZ   TYR B 112      8.174  61.440  74.203  1.00  18.75          C
ATOM   4181   OH   TYR B 112      7.013  60.943  74.743  1.00  18.73          O
ATOM   4182   N    PRO B 113     11.060  65.540  70.740  1.00  14.02          N
ATOM   4183   CA   PRO B 113     10.110  66.369  69.988  1.00  14.39          C
ATOM   4184   C    PRO B 113      8.667  65.898  70.208  1.00  15.16          C
ATOM   4185   O    PRO B 113      8.366  64.705  70.075  1.00  14.81          O
ATOM   4186   CB   PRO B 113     10.571  66.193  68.544  1.00  13.37          C
ATOM   4187   CG   PRO B 113     12.053  66.002  68.698  1.00  13.40          C
ATOM   4188   CD   PRO B 113     12.119  65.029  69.851  1.00  14.36          C
ATOM   4189   N    ALA B 114      7.786  66.848  70.517  1.00  13.97          N
ATOM   4190   CA   ALA B 114      6.383  66.568  70.823  1.00  15.35          C
ATOM   4191   C    ALA B 114      5.581  65.710  69.843  1.00  15.85          C
ATOM   4192   O    ALA B 114      4.545  65.169  70.228  1.00  16.65          O
ATOM   4193   CB   ALA B 114      5.639  67.881  71.087  1.00  14.29          C
ATOM   4194   N    ASN B 115      6.034  65.582  68.596  1.00  14.78          N
ATOM   4195   CA   ASN B 115      5.298  64.766  67.631  1.00  14.60          C
ATOM   4196   C    ASN B 115      5.833  63.336  67.495  1.00  13.09          C
ATOM   4197   O    ASN B 115      5.403  62.588  66.624  1.00  13.39          O
ATOM   4198   CB   ASN B 115      5.240  65.464  66.255  1.00  13.97          C
ATOM   4199   CG   ASN B 115      6.616  65.717  65.648  1.00  16.67          C
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| ATOM | 4200 | OD1 | ASN | B | 115 | 7.605 | 65.895 | 66.362 | 1.00 | 11.92 | O |
|------|------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 4201 | ND2 | ASN | B | 115 | 6.675 | 65.758 | 64.315 | 1.00 | 14.47 | N |
| ATOM | 4202 | N | SER | B | 116 | 6.748 | 62.949 | 68.381 | 1.00 | 13.73 | N |
| ATOM | 4203 | CA | SER | B | 116 | 7.325 | 61.602 | 68.344 | 1.00 | 13.58 | C |
| ATOM | 4204 | C | SER | B | 116 | 6.309 | 60.482 | 68.568 | 1.00 | 13.70 | C |
| ATOM | 4205 | O | SER | B | 116 | 6.233 | 59.553 | 67.762 | 1.00 | 14.67 | O |
| ATOM | 4206 | CB | SER | B | 116 | 8.447 | 61.466 | 69.376 | 1.00 | 11.69 | C |
| ATOM | 4207 | OG | SER | B | 116 | 9.521 | 62.331 | 69.067 | 1.00 | 15.67 | O |
| ATOM | 4208 | N | VAL | B | 117 | 5.541 | 60.545 | 69.658 | 1.00 | 13.02 | N |
| ATOM | 4209 | CA | VAL | B | 117 | 4.556 | 59.494 | 69.914 | 1.00 | 13.60 | C |
| ATOM | 4210 | C | VAL | B | 117 | 3.554 | 59.433 | 68.749 | 1.00 | 14.49 | C |
| ATOM | 4211 | O | VAL | B | 117 | 3.242 | 58.355 | 68.247 | 1.00 | 16.02 | O |
| ATOM | 4212 | CB | VAL | B | 117 | 3.827 | 59.710 | 71.269 | 1.00 | 14.64 | C |
| ATOM | 4213 | CG1 | VAL | B | 117 | 2.753 | 58.643 | 71.471 | 1.00 | 14.71 | C |
| ATOM | 4214 | CG2 | VAL | B | 117 | 4.830 | 59.635 | 72.408 | 1.00 | 13.93 | C |
| ATOM | 4215 | N | PRO | B | 118 | 3.035 | 60.587 | 68.303 | 1.00 | 14.34 | N |
| ATOM | 4216 | CA | PRO | B | 118 | 2.091 | 60.534 | 67.180 | 1.00 | 16.35 | C |
| ATOM | 4217 | C | PRO | B | 118 | 2.632 | 59.689 | 66.014 | 1.00 | 16.79 | C |
| ATOM | 4218 | O | PRO | B | 118 | 1.912 | 58.871 | 65.459 | 1.00 | 17.60 | O |
| ATOM | 4219 | CB | PRO | B | 118 | 1.928 | 62.004 | 66.805 | 1.00 | 15.06 | C |
| ATOM | 4220 | CG | PRO | B | 118 | 1.939 | 62.659 | 68.154 | 1.00 | 17.79 | C |
| ATOM | 4221 | CD | PRO | B | 118 | 3.095 | 61.947 | 68.875 | 1.00 | 14.07 | C |
| ATOM | 4222 | N | GLN | B | 119 | 3.900 | 59.891 | 65.656 | 1.00 | 16.41 | N |
| ATOM | 4223 | CA | GLN | B | 119 | 4.527 | 59.141 | 64.573 | 1.00 | 17.37 | C |
| ATOM | 4224 | C | GLN | B | 119 | 4.574 | 57.635 | 64.865 | 1.00 | 16.69 | C |
| ATOM | 4225 | O | GLN | B | 119 | 4.361 | 56.821 | 63.976 | 1.00 | 15.52 | O |
| ATOM | 4226 | CB | GLN | B | 119 | 5.955 | 59.646 | 64.324 | 1.00 | 20.45 | C |
| ATOM | 4227 | CG | GLN | B | 119 | 6.051 | 60.939 | 63.535 | 1.00 | 27.31 | C |
| ATOM | 4228 | CD | GLN | B | 119 | 5.501 | 60.803 | 62.130 | 1.00 | 30.55 | C |
| ATOM | 4229 | OE1 | GLN | B | 119 | 4.284 | 60.831 | 61.919 | 1.00 | 34.05 | O |
| ATOM | 4230 | NE2 | GLN | B | 119 | 6.395 | 60.639 | 61.159 | 1.00 | 31.56 | N |
| ATOM | 4231 | N | VAL | B | 120 | 4.867 | 57.259 | 66.105 | 1.00 | 14.70 | N |
| ATOM | 4232 | CA | VAL | B | 120 | 4.909 | 55.843 | 66.430 | 1.00 | 13.71 | C |
| ATOM | 4233 | C | VAL | B | 120 | 3.500 | 55.263 | 66.383 | 1.00 | 13.98 | C |
| ATOM | 4234 | O | VAL | B | 120 | 3.323 | 54.098 | 66.039 | 1.00 | 15.42 | O |
| ATOM | 4235 | CB | VAL | B | 120 | 5.561 | 55.596 | 67.804 | 1.00 | 12.96 | C |
| ATOM | 4236 | CG1 | VAL | B | 120 | 5.455 | 54.122 | 68.189 | 1.00 | 12.14 | C |
| ATOM | 4237 | CG2 | VAL | B | 120 | 7.027 | 56.020 | 67.741 | 1.00 | 9.81 | C |
| ATOM | 4238 | N | VAL | B | 121 | 2.495 | 56.073 | 66.708 | 1.00 | 13.68 | N |
| ATOM | 4239 | CA | VAL | B | 121 | 1.114 | 55.590 | 66.642 | 1.00 | 13.02 | C |
| ATOM | 4240 | C | VAL | B | 121 | 0.796 | 55.302 | 65.185 | 1.00 | 12.84 | C |
| ATOM | 4241 | O | VAL | B | 121 | 0.224 | 54.267 | 64.861 | 1.00 | 15.53 | O |
| ATOM | 4242 | CB | VAL | B | 121 | 0.087 | 56.628 | 67.132 | 1.00 | 11.36 | C |
| ATOM | 4243 | CG1 | VAL | B | 121 | -1.335 | 56.128 | 66.833 | 1.00 | 10.28 | C |
| ATOM | 4244 | CG2 | VAL | B | 121 | 0.248 | 56.868 | 68.610 | 1.00 | 9.00 | C |
| ATOM | 4245 | N | ARG | B | 122 | 1.165 | 56.231 | 64.310 | 1.00 | 11.47 | N |
| ATOM | 4246 | CA | ARG | B | 122 | 0.924 | 56.072 | 62.885 | 1.00 | 12.18 | C |
| ATOM | 4247 | C | ARG | B | 122 | 1.668 | 54.836 | 62.407 | 1.00 | 12.67 | C |
| ATOM | 4248 | O | ARG | B | 122 | 1.136 | 54.048 | 61.629 | 1.00 | 12.23 | O |
| ATOM | 4249 | CB | ARG | B | 122 | 1.427 | 57.302 | 62.121 | 1.00 | 12.33 | C |
| ATOM | 4250 | CG | ARG | B | 122 | 1.250 | 57.231 | 60.593 | 1.00 | 14.33 | C |
| ATOM | 4251 | CD | ARG | B | 122 | -0.224 | 57.187 | 60.170 | 1.00 | 15.26 | C |
| ATOM | 4252 | NE | ARG | B | 122 | -0.743 | 55.833 | 59.938 | 1.00 | 14.49 | N |
| ATOM | 4253 | CZ | ARG | B | 122 | -1.996 | 55.567 | 59.560 | 1.00 | 14.69 | C |
| ATOM | 4254 | NH1 | ARG | B | 122 | -2.856 | 56.557 | 59.381 | 1.00 | 11.56 | N |
| ATOM | 4255 | NH2 | ARG | B | 122 | -2.391 | 54.318 | 59.336 | 1.00 | 11.24 | N |
| ATOM | 4256 | N | ARG | B | 123 | 2.902 | 54.677 | 62.888 | 1.00 | 11.54 | N |
| ATOM | 4257 | CA | ARG | B | 123 | 3.737 | 53.550 | 62.516 | 1.00 | 12.85 | C |
| ATOM | 4258 | C | ARG | B | 123 | 3.125 | 52.212 | 62.928 | 1.00 | 12.48 | C |
| ATOM | 4259 | O | ARG | B | 123 | 3.096 | 51.270 | 62.143 | 1.00 | 15.12 | O |
| ATOM | 4260 | CB | ARG | B | 123 | 5.141 | 53.717 | 63.133 | 1.00 | 14.64 | C |
| ATOM | 4261 | CG | ARG | B | 123 | 6.020 | 52.468 | 63.063 | 1.00 | 12.21 | C |
| ATOM | 4262 | CD | ARG | B | 123 | 6.095 | 51.900 | 61.650 | 1.00 | 12.31 | C |
| ATOM | 4263 | NE | ARG | B | 123 | 6.693 | 50.572 | 61.647 | 1.00 | 13.62 | N |
| ATOM | 4264 | CZ | ARG | B | 123 | 6.424 | 49.631 | 60.747 | 1.00 | 16.74 | C |
| ATOM | 4265 | NH1 | ARG | B | 123 | 5.562 | 49.875 | 59.766 | 1.00 | 14.24 | N |
| ATOM | 4266 | NH2 | ARG | B | 123 | 7.002 | 48.436 | 60.841 | 1.00 | 15.76 | N |
| ATOM | 4267 | N | ILE | B | 124 | 2.634 | 52.134 | 64.157 | 1.00 | 14.71 | N |
| ATOM | 4268 | CA | ILE | B | 124 | 2.026 | 50.908 | 64.661 | 1.00 | 15.74 | C |
| ATOM | 4269 | C | ILE | B | 124 | 0.782 | 50.571 | 63.840 | 1.00 | 17.78 | C |
| ATOM | 4270 | O | ILE | B | 124 | 0.563 | 49.411 | 63.471 | 1.00 | 18.10 | O |
| ATOM | 4271 | CB | ILE | B | 124 | 1.674 | 51.054 | 66.169 | 1.00 | 16.68 | C |
| ATOM | 4272 | CG1 | ILE | B | 124 | 2.972 | 51.070 | 66.992 | 1.00 | 15.09 | C |
| ATOM | 4273 | CG2 | ILE | B | 124 | 0.770 | 49.917 | 66.626 | 1.00 | 14.41 | C |
| ATOM | 4274 | CD1 | ILE | B | 124 | 2.767 | 51.346 | 68.475 | 1.00 | 14.68 | C |
| ATOM | 4275 | N | ASN | B | 125 | -0.028 | 51.580 | 63.536 | 1.00 | 16.18 | N |
| ATOM | 4276 | CA | ASN | B | 125 | -1.208 | 51.327 | 62.736 | 1.00 | 16.45 | C |
| ATOM | 4277 | C | ASN | B | 125 | -0.843 | 50.816 | 61.338 | 1.00 | 16.12 | C |
| ATOM | 4278 | O | ASN | B | 125 | -1.521 | 49.933 | 60.815 | 1.00 | 16.98 | O |
| ATOM | 4279 | CB | ASN | B | 125 | -2.094 | 52.580 | 62.655 | 1.00 | 16.29 | C |

| ATOM | 4280 | CG  | ASN | B | 125 | -3.100 | 52.651 | 63.801 | 1.00 | 17.50 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4281 | OD1 | ASN | B | 125 | -3.597 | 51.619 | 64.262 | 1.00 | 14.11 | O |
| ATOM | 4282 | ND2 | ASN | B | 125 | -3.407 | 53.862 | 64.261 | 1.00 | 14.16 | N |
| ATOM | 4283 | N   | ASN | B | 126 | 0.226  | 51.354 | 60.739 | 1.00 | 15.08 | N |
| ATOM | 4284 | CA  | ASN | B | 126 | 0.659  | 50.908 | 59.410 | 1.00 | 14.44 | C |
| ATOM | 4285 | C   | ASN | B | 126 | 1.083  | 49.441 | 59.463 | 1.00 | 14.13 | C |
| ATOM | 4286 | O   | ASN | B | 126 | 0.752  | 48.653 | 58.583 | 1.00 | 16.85 | O |
| ATOM | 4287 | CB  | ASN | B | 126 | 1.849  | 51.730 | 58.886 | 1.00 | 12.19 | C |
| ATOM | 4288 | CG  | ASN | B | 126 | 1.491  | 53.171 | 58.565 | 1.00 | 12.70 | C |
| ATOM | 4289 | OD1 | ASN | B | 126 | 0.329  | 53.508 | 58.358 | 1.00 | 13.16 | O |
| ATOM | 4290 | ND2 | ASN | B | 126 | 2.508  | 54.030 | 58.499 | 1.00 | 10.31 | N |
| ATOM | 4291 | N   | ALA | B | 127 | 1.832  | 49.086 | 60.500 | 1.00 | 14.52 | N |
| ATOM | 4292 | CA  | ALA | B | 127 | 2.305  | 47.717 | 60.674 | 1.00 | 14.75 | C |
| ATOM | 4293 | C   | ALA | B | 127 | 1.126  | 46.766 | 60.834 | 1.00 | 13.55 | C |
| ATOM | 4294 | O   | ALA | B | 127 | 1.109  | 45.683 | 60.251 | 1.00 | 13.18 | O |
| ATOM | 4295 | CB  | ALA | B | 127 | 3.224  | 47.626 | 61.908 | 1.00 | 13.90 | C |
| ATOM | 4296 | N   | LEU | B | 128 | 0.148  | 47.167 | 61.640 | 1.00 | 13.06 | N |
| ATOM | 4297 | CA  | LEU | B | 128 | -1.025 | 46.331 | 61.860 | 1.00 | 14.67 | C |
| ATOM | 4298 | C   | LEU | B | 128 | -1.847 | 46.246 | 60.588 | 1.00 | 16.05 | C |
| ATOM | 4299 | O   | LEU | B | 128 | -2.480 | 45.222 | 60.314 | 1.00 | 16.87 | O |
| ATOM | 4300 | CB  | LEU | B | 128 | -1.875 | 46.882 | 63.004 | 1.00 | 12.04 | C |
| ATOM | 4301 | CG  | LEU | B | 128 | -1.162 | 46.862 | 64.362 | 1.00 | 12.67 | C |
| ATOM | 4302 | CD1 | LEU | B | 128 | -2.037 | 47.529 | 65.424 | 1.00 | 11.14 | C |
| ATOM | 4303 | CD2 | LEU | B | 128 | -0.831 | 45.428 | 64.754 | 1.00 | 9.49  | C |
| ATOM | 4304 | N   | GLN | B | 129 | -1.829 | 47.319 | 59.802 | 1.00 | 16.48 | N |
| ATOM | 4305 | CA  | GLN | B | 129 | -2.572 | 47.329 | 58.554 | 1.00 | 15.95 | C |
| ATOM | 4306 | C   | GLN | B | 129 | -1.935 | 46.371 | 57.561 | 1.00 | 16.09 | C |
| ATOM | 4307 | O   | GLN | B | 129 | -2.636 | 45.694 | 56.808 | 1.00 | 14.62 | O |
| ATOM | 4308 | CB  | GLN | B | 129 | -2.629 | 48.744 | 57.974 | 1.00 | 16.01 | C |
| ATOM | 4309 | CG  | GLN | B | 129 | -3.669 | 49.634 | 58.649 | 1.00 | 18.53 | C |
| ATOM | 4310 | CD  | GLN | B | 129 | -3.652 | 51.056 | 58.128 | 1.00 | 19.08 | C |
| ATOM | 4311 | OE1 | GLN | B | 129 | -2.655 | 51.764 | 58.264 | 1.00 | 22.19 | O |
| ATOM | 4312 | NE2 | GLN | B | 129 | -4.755 | 51.482 | 57.523 | 1.00 | 19.81 | N |
| ATOM | 4313 | N   | ARG | B | 130 | -0.605 | 46.302 | 57.560 | 1.00 | 16.63 | N |
| ATOM | 4314 | CA  | ARG | B | 130 | 0.069  | 45.395 | 56.640 | 1.00 | 16.06 | C |
| ATOM | 4315 | C   | ARG | B | 130 | -0.199 | 43.947 | 57.041 | 1.00 | 16.20 | C |
| ATOM | 4316 | O   | ARG | B | 130 | -0.360 | 43.085 | 56.181 | 1.00 | 17.52 | O |
| ATOM | 4317 | CB  | ARG | B | 130 | 1.576  | 45.635 | 56.619 | 1.00 | 14.23 | C |
| ATOM | 4318 | CG  | ARG | B | 130 | 2.272  | 44.829 | 55.520 | 1.00 | 12.75 | C |
| ATOM | 4319 | CD  | ARG | B | 130 | 1.947  | 45.405 | 54.149 | 1.00 | 13.73 | C |
| ATOM | 4320 | NE  | ARG | B | 130 | 2.706  | 46.629 | 53.908 | 1.00 | 15.03 | N |
| ATOM | 4321 | CZ  | ARG | B | 130 | 2.297  | 47.634 | 53.141 | 1.00 | 13.69 | C |
| ATOM | 4322 | NH1 | ARG | B | 130 | 1.118  | 47.580 | 52.532 | 1.00 | 12.38 | N |
| ATOM | 4323 | NH2 | ARG | B | 130 | 3.081  | 48.689 | 52.970 | 1.00 | 12.81 | N |
| ATOM | 4324 | N   | ALA | B | 131 | -0.232 | 43.679 | 58.344 | 1.00 | 15.35 | N |
| ATOM | 4325 | CA  | ALA | B | 131 | -0.502 | 42.328 | 58.827 | 1.00 | 16.40 | C |
| ATOM | 4326 | C   | ALA | B | 131 | -1.912 | 41.955 | 58.396 | 1.00 | 17.59 | C |
| ATOM | 4327 | O   | ALA | B | 131 | -2.163 | 40.834 | 57.958 | 1.00 | 17.87 | O |
| ATOM | 4328 | CB  | ALA | B | 131 | -0.398 | 42.272 | 60.337 | 1.00 | 15.06 | C |
| ATOM | 4329 | N   | ASP | B | 132 | -2.824 | 42.914 | 58.533 | 1.00 | 18.49 | N |
| ATOM | 4330 | CA  | ASP | B | 132 | -4.226 | 42.731 | 58.164 | 1.00 | 19.13 | C |
| ATOM | 4331 | C   | ASP | B | 132 | -4.329 | 42.368 | 56.679 | 1.00 | 19.52 | C |
| ATOM | 4332 | O   | ASP | B | 132 | -5.001 | 41.412 | 56.312 | 1.00 | 19.07 | O |
| ATOM | 4333 | CB  | ASP | B | 132 | -4.996 | 44.023 | 58.452 | 1.00 | 18.53 | C |
| ATOM | 4334 | CG  | ASP | B | 132 | -6.473 | 43.908 | 58.146 | 1.00 | 20.46 | C |
| ATOM | 4335 | OD1 | ASP | B | 132 | -7.125 | 43.002 | 58.695 | 1.00 | 22.23 | O |
| ATOM | 4336 | OD2 | ASP | B | 132 | -6.990 | 44.726 | 57.359 | 1.00 | 24.26 | O |
| ATOM | 4337 | N   | GLN | B | 133 | -3.640 | 43.139 | 55.841 | 1.00 | 19.13 | N |
| ATOM | 4338 | CA  | GLN | B | 133 | -3.620 | 42.935 | 54.402 | 1.00 | 17.68 | C |
| ATOM | 4339 | C   | GLN | B | 133 | -3.078 | 41.565 | 54.037 | 1.00 | 18.62 | C |
| ATOM | 4340 | O   | GLN | B | 133 | -3.665 | 40.856 | 53.221 | 1.00 | 15.89 | O |
| ATOM | 4341 | CB  | GLN | B | 133 | -2.759 | 44.011 | 53.742 | 1.00 | 17.44 | C |
| ATOM | 4342 | CG  | GLN | B | 133 | -3.350 | 45.404 | 53.841 | 1.00 | 18.26 | C |
| ATOM | 4343 | CD  | GLN | B | 133 | -2.297 | 46.507 | 53.783 | 1.00 | 18.31 | C |
| ATOM | 4344 | OE1 | GLN | B | 133 | -2.626 | 47.689 | 53.842 | 1.00 | 18.23 | O |
| ATOM | 4345 | NE2 | GLN | B | 133 | -1.034 | 46.123 | 53.677 | 1.00 | 19.66 | N |
| ATOM | 4346 | N   | ILE | B | 134 | -1.952 | 41.208 | 54.647 | 1.00 | 19.60 | N |
| ATOM | 4347 | CA  | ILE | B | 134 | -1.308 | 39.926 | 54.399 | 1.00 | 20.75 | C |
| ATOM | 4348 | C   | ILE | B | 134 | -2.196 | 38.765 | 54.834 | 1.00 | 21.50 | C |
| ATOM | 4349 | O   | ILE | B | 134 | -2.225 | 37.730 | 54.179 | 1.00 | 23.86 | O |
| ATOM | 4350 | CB  | ILE | B | 134 | 0.042  | 39.819 | 55.152 | 1.00 | 20.50 | C |
| ATOM | 4351 | CG1 | ILE | B | 134 | 1.014  | 40.877 | 54.627 | 1.00 | 17.35 | C |
| ATOM | 4352 | CG2 | ILE | B | 134 | 0.627  | 38.410 | 54.982 | 1.00 | 16.99 | C |
| ATOM | 4353 | CD1 | ILE | B | 134 | 2.292  | 40.981 | 55.434 | 1.00 | 16.16 | C |
| ATOM | 4354 | N   | ALA | B | 135 | -2.911 | 38.933 | 55.940 | 1.00 | 21.73 | N |
| ATOM | 4355 | CA  | ALA | B | 135 | -3.792 | 37.881 | 56.433 | 1.00 | 23.10 | C |
| ATOM | 4356 | C   | ALA | B | 135 | -4.936 | 37.652 | 55.449 | 1.00 | 25.15 | C |
| ATOM | 4357 | O   | ALA | B | 135 | -5.371 | 36.521 | 55.226 | 1.00 | 25.35 | O |
| ATOM | 4358 | CB  | ALA | B | 135 | -4.342 | 38.259 | 57.786 | 1.00 | 21.24 | C |
| ATOM | 4359 | N   | LYS | B | 136 | -5.420 | 38.734 | 54.855 | 1.00 | 26.31 | N |

| ATOM | 4360 | CA | LYS B 136 | -6.511 | 38.632 | 53.904 | 1.00 27.99 | C |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 4361 | C | LYS B 136 | -6.118 | 37.798 | 52.690 | 1.00 28.66 | C |
| ATOM | 4362 | O | LYS B 136 | -6.849 | 36.885 | 52.296 | 1.00 28.91 | O |
| ATOM | 4363 | CB | LYS B 136 | -6.961 | 40.024 | 53.451 | 1.00 27.22 | C |
| ATOM | 4364 | CG | LYS B 136 | -8.245 | 39.998 | 52.638 | 1.00 28.94 | C |
| ATOM | 4365 | CD | LYS B 136 | -8.771 | 41.396 | 52.354 | 1.00 30.00 | C |
| ATOM | 4366 | CE | LYS B 136 | -10.127 | 41.346 | 51.658 | 1.00 29.12 | C |
| ATOM | 4367 | NZ | LYS B 136 | -10.687 | 42.709 | 51.412 | 1.00 27.72 | N |
| ATOM | 4368 | N | ILE B 137 | -4.964 | 38.099 | 52.097 | 1.00 27.71 | N |
| ATOM | 4369 | CA | ILE B 137 | -4.537 | 37.354 | 50.921 | 1.00 28.49 | C |
| ATOM | 4370 | C | ILE B 137 | -4.054 | 35.950 | 51.246 | 1.00 28.59 | C |
| ATOM | 4371 | O | ILE B 137 | -3.950 | 35.118 | 50.353 | 1.00 30.23 | O |
| ATOM | 4372 | CB | ILE B 137 | -3.416 | 38.075 | 50.141 | 1.00 29.49 | C |
| ATOM | 4373 | CG1 | ILE B 137 | -2.146 | 38.138 | 50.986 | 1.00 28.24 | C |
| ATOM | 4374 | CG2 | ILE B 137 | -3.888 | 39.459 | 49.718 | 1.00 30.61 | C |
| ATOM | 4375 | CD1 | ILE B 137 | -0.931 | 38.585 | 50.216 | 1.00 26.96 | C |
| ATOM | 4376 | N | GLU B 138 | -3.745 | 35.684 | 52.512 | 1.00 27.75 | N |
| ATOM | 4377 | CA | GLU B 138 | -3.293 | 34.353 | 52.897 | 1.00 28.38 | C |
| ATOM | 4378 | C | GLU B 138 | -4.467 | 33.524 | 53.417 | 1.00 28.63 | C |
| ATOM | 4379 | O | GLU B 138 | -4.309 | 32.350 | 53.736 | 1.00 29.06 | O |
| ATOM | 4380 | CB | GLU B 138 | -2.192 | 34.429 | 53.969 | 1.00 27.70 | C |
| ATOM | 4381 | CG | GLU B 138 | -0.939 | 35.185 | 53.529 | 1.00 29.49 | C |
| ATOM | 4382 | CD | GLU B 138 | 0.211 | 35.073 | 54.521 | 1.00 28.17 | C |
| ATOM | 4383 | OE1 | GLU B 138 | -0.042 | 35.129 | 55.743 | 1.00 27.80 | O |
| ATOM | 4384 | OE2 | GLU B 138 | 1.372 | 34.944 | 54.078 | 1.00 28.08 | O |
| ATOM | 4385 | N | GLY B 139 | -5.646 | 34.137 | 53.481 | 1.00 30.44 | N |
| ATOM | 4386 | CA | GLY B 139 | -6.822 | 33.436 | 53.968 | 1.00 30.17 | C |
| ATOM | 4387 | C | GLY B 139 | -6.635 | 33.046 | 55.421 | 1.00 31.84 | C |
| ATOM | 4388 | O | GLY B 139 | -7.225 | 32.079 | 55.902 | 1.00 32.45 | O |
| ATOM | 4389 | N | ASP B 140 | -5.799 | 33.809 | 56.120 | 1.00 32.73 | N |
| ATOM | 4390 | CA | ASP B 140 | -5.508 | 33.562 | 57.525 | 1.00 31.55 | C |
| ATOM | 4391 | C | ASP B 140 | -6.515 | 34.259 | 58.437 | 1.00 32.57 | C |
| ATOM | 4392 | O | ASP B 140 | -6.527 | 35.485 | 58.549 | 1.00 32.18 | O |
| ATOM | 4393 | CB | ASP B 140 | -4.083 | 34.030 | 57.837 | 1.00 30.60 | C |
| ATOM | 4394 | CG | ASP B 140 | -3.780 | 34.047 | 59.318 | 1.00 29.79 | C |
| ATOM | 4395 | OD1 | ASP B 140 | -4.577 | 33.498 | 60.103 | 1.00 27.92 | O |
| ATOM | 4396 | OD2 | ASP B 140 | -2.735 | 34.610 | 59.697 | 1.00 30.66 | O |
| ATOM | 4397 | N | THR B 141 | -7.359 | 33.466 | 59.088 | 1.00 33.82 | N |
| ATOM | 4398 | CA | THR B 141 | -8.368 | 34.006 | 59.988 | 1.00 35.58 | C |
| ATOM | 4399 | C | THR B 141 | -7.947 | 33.829 | 61.442 | 1.00 35.44 | C |
| ATOM | 4400 | O | THR B 141 | -8.756 | 33.963 | 62.358 | 1.00 37.44 | O |
| ATOM | 4401 | CB | THR B 141 | -9.730 | 33.326 | 59.771 | 1.00 36.56 | C |
| ATOM | 4402 | OG1 | THR B 141 | -9.598 | 31.914 | 59.977 | 1.00 38.79 | O |
| ATOM | 4403 | CG2 | THR B 141 | -10.229 | 33.582 | 58.359 | 1.00 35.88 | C |
| ATOM | 4404 | N | SER B 142 | -6.668 | 33.533 | 61.638 | 1.00 35.56 | N |
| ATOM | 4405 | CA | SER B 142 | -6.092 | 33.350 | 62.964 | 1.00 34.39 | C |
| ATOM | 4406 | C | SER B 142 | -6.444 | 34.500 | 63.913 | 1.00 33.67 | C |
| ATOM | 4407 | O | SER B 142 | -6.780 | 34.274 | 65.076 | 1.00 35.05 | O |
| ATOM | 4408 | CB | SER B 142 | -4.568 | 33.229 | 62.840 | 1.00 33.97 | C |
| ATOM | 4409 | OG | SER B 142 | -3.929 | 33.402 | 64.091 | 1.00 39.16 | O |
| ATOM | 4410 | N | VAL B 143 | -6.366 | 35.728 | 63.410 | 1.00 31.94 | N |
| ATOM | 4411 | CA | VAL B 143 | -6.656 | 36.923 | 64.203 | 1.00 29.73 | C |
| ATOM | 4412 | C | VAL B 143 | -7.956 | 37.584 | 63.756 | 1.00 29.81 | C |
| ATOM | 4413 | O | VAL B 143 | -8.129 | 37.904 | 62.581 | 1.00 30.19 | O |
| ATOM | 4414 | CB | VAL B 143 | -5.504 | 37.955 | 64.082 | 1.00 28.85 | C |
| ATOM | 4415 | CG1 | VAL B 143 | -5.856 | 39.237 | 64.813 | 1.00 27.74 | C |
| ATOM | 4416 | CG2 | VAL B 143 | -4.226 | 37.364 | 64.641 | 1.00 28.72 | C |
| ATOM | 4417 | N | GLU B 144 | -8.855 | 37.802 | 64.707 | 1.00 28.95 | N |
| ATOM | 4418 | CA | GLU B 144 | -10.146 | 38.416 | 64.434 | 1.00 31.28 | C |
| ATOM | 4419 | C | GLU B 144 | -10.044 | 39.915 | 64.131 | 1.00 29.05 | C |
| ATOM | 4420 | O | GLU B 144 | -10.736 | 40.423 | 63.250 | 1.00 28.27 | O |
| ATOM | 4421 | CB | GLU B 144 | -11.090 | 38.194 | 65.625 | 1.00 35.97 | C |
| ATOM | 4422 | CG | GLU B 144 | -10.760 | 39.046 | 66.850 | 1.00 43.19 | C |
| ATOM | 4423 | CD | GLU B 144 | -9.337 | 38.841 | 67.361 | 1.00 48.38 | C |
| ATOM | 4424 | OE1 | GLU B 144 | -8.710 | 39.841 | 67.789 | 1.00 48.25 | O |
| ATOM | 4425 | OE2 | GLU B 144 | -8.853 | 37.682 | 67.345 | 1.00 50.24 | O |
| ATOM | 4426 | N | ASN B 145 | -9.188 | 40.619 | 64.866 | 1.00 27.55 | N |
| ATOM | 4427 | CA | ASN B 145 | -9.006 | 42.059 | 64.666 | 1.00 25.02 | C |
| ATOM | 4428 | C | ASN B 145 | -7.540 | 42.465 | 64.780 | 1.00 24.23 | C |
| ATOM | 4429 | O | ASN B 145 | -7.019 | 42.635 | 65.882 | 1.00 21.17 | O |
| ATOM | 4430 | CB | ASN B 145 | -9.813 | 42.854 | 65.693 | 1.00 24.12 | C |
| ATOM | 4431 | CG | ASN B 145 | -9.578 | 44.354 | 65.585 | 1.00 24.99 | C |
| ATOM | 4432 | OD1 | ASN B 145 | -9.627 | 45.074 | 66.580 | 1.00 27.32 | O |
| ATOM | 4433 | ND2 | ASN B 145 | -9.331 | 44.830 | 64.374 | 1.00 23.70 | N |
| ATOM | 4434 | N | TRP B 146 | -6.885 | 42.623 | 63.633 | 1.00 23.86 | N |
| ATOM | 4435 | CA | TRP B 146 | -5.483 | 43.019 | 63.584 | 1.00 21.91 | C |
| ATOM | 4436 | C | TRP B 146 | -5.296 | 44.459 | 64.047 | 1.00 22.56 | C |
| ATOM | 4437 | O | TRP B 146 | -4.256 | 44.823 | 64.598 | 1.00 23.60 | O |
| ATOM | 4438 | CB | TRP B 146 | -4.945 | 42.876 | 62.160 | 1.00 20.68 | C |
| ATOM | 4439 | CG | TRP B 146 | -4.520 | 41.492 | 61.845 | 1.00 21.75 | C |

| ATOM | 4440 | CD1 | TRP | B | 146 | -5.204 | 40.559 | 61.114 | 1.00 | 22.29 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 4441 | CD2 | TRP | B | 146 | -3.327 | 40.852 | 62.304 | 1.00 | 21.36 | C |
| ATOM | 4442 | NE1 | TRP | B | 146 | -4.505 | 39.371 | 61.093 | 1.00 | 24.45 | N |
| ATOM | 4443 | CE2 | TRP | B | 146 | -3.349 | 39.525 | 61.816 | 1.00 | 22.20 | C |
| ATOM | 4444 | CE3 | TRP | B | 146 | -2.238 | 41.271 | 63.085 | 1.00 | 21.36 | C |
| ATOM | 4445 | CZ2 | TRP | B | 146 | -2.322 | 38.610 | 62.085 | 1.00 | 21.82 | C |
| ATOM | 4446 | CZ3 | TRP | B | 146 | -1.215 | 40.361 | 63.353 | 1.00 | 20.79 | C |
| ATOM | 4447 | CH2 | TRP | B | 146 | -1.268 | 39.044 | 62.853 | 1.00 | 21.59 | C |
| ATOM | 4448 | N   | LEU | B | 147 | -6.313 | 45.275 | 63.817 | 1.00 | 21.44 | N |
| ATOM | 4449 | CA  | LEU | B | 147 | -6.260 | 46.670 | 64.206 | 1.00 | 22.14 | C |
| ATOM | 4450 | C   | LEU | B | 147 | -6.672 | 46.853 | 65.653 | 1.00 | 21.27 | C |
| ATOM | 4451 | O   | LEU | B | 147 | -7.725 | 47.420 | 65.946 | 1.00 | 20.03 | O |
| ATOM | 4452 | CB  | LEU | B | 147 | -7.149 | 47.496 | 63.279 | 1.00 | 22.47 | C |
| ATOM | 4453 | CG  | LEU | B | 147 | -6.459 | 47.768 | 61.941 | 1.00 | 23.45 | C |
| ATOM | 4454 | CD1 | LEU | B | 147 | -7.468 | 48.190 | 60.891 | 1.00 | 27.07 | C |
| ATOM | 4455 | CD2 | LEU | B | 147 | -5.412 | 48.858 | 62.154 | 1.00 | 22.72 | C |
| ATOM | 4456 | N   | ALA | B | 148 | -5.831 | 46.353 | 66.554 | 1.00 | 19.32 | N |
| ATOM | 4457 | CA  | ALA | B | 148 | -6.086 | 46.461 | 67.981 | 1.00 | 19.80 | C |
| ATOM | 4458 | C   | ALA | B | 148 | -5.981 | 47.925 | 68.390 | 1.00 | 18.66 | C |
| ATOM | 4459 | O   | ALA | B | 148 | -5.185 | 48.673 | 67.832 | 1.00 | 20.41 | O |
| ATOM | 4460 | CB  | ALA | B | 148 | -5.074 | 45.615 | 68.762 | 1.00 | 17.86 | C |
| ATOM | 4461 | N   | PRO | B | 149 | -6.791 | 48.355 | 69.370 | 1.00 | 18.74 | N |
| ATOM | 4462 | CA  | PRO | B | 149 | -6.743 | 49.753 | 69.812 | 1.00 | 18.09 | C |
| ATOM | 4463 | C   | PRO | B | 149 | -5.411 | 50.120 | 70.464 | 1.00 | 17.93 | C |
| ATOM | 4464 | O   | PRO | B | 149 | -4.810 | 49.314 | 71.176 | 1.00 | 16.47 | O |
| ATOM | 4465 | CB  | PRO | B | 149 | -7.925 | 49.851 | 70.779 | 1.00 | 16.42 | C |
| ATOM | 4466 | CG  | PRO | B | 149 | -8.026 | 48.466 | 71.335 | 1.00 | 16.89 | C |
| ATOM | 4467 | CD  | PRO | B | 149 | -7.816 | 47.603 | 70.111 | 1.00 | 16.52 | C |
| ATOM | 4468 | N   | ILE | B | 150 | -4.970 | 51.351 | 70.220 | 1.00 | 17.99 | N |
| ATOM | 4469 | CA  | ILE | B | 150 | -3.711 | 51.855 | 70.754 | 1.00 | 15.38 | C |
| ATOM | 4470 | C   | ILE | B | 150 | -3.909 | 52.913 | 71.841 | 1.00 | 15.56 | C |
| ATOM | 4471 | O   | ILE | B | 150 | -4.591 | 53.917 | 71.631 | 1.00 | 16.87 | O |
| ATOM | 4472 | CB  | ILE | B | 150 | -2.846 | 52.499 | 69.627 | 1.00 | 14.59 | C |
| ATOM | 4473 | CG1 | ILE | B | 150 | -2.531 | 51.464 | 68.539 | 1.00 | 13.87 | C |
| ATOM | 4474 | CG2 | ILE | B | 150 | -1.559 | 53.078 | 70.218 | 1.00 | 11.81 | C |
| ATOM | 4475 | CD1 | ILE | B | 150 | -1.987 | 52.073 | 67.239 | 1.00 |  9.95 | C |
| ATOM | 4476 | N   | VAL | B | 151 | -3.311 | 52.683 | 73.002 | 1.00 | 13.89 | N |
| ATOM | 4477 | CA  | VAL | B | 151 | -3.373 | 53.644 | 74.091 | 1.00 | 14.97 | C |
| ATOM | 4478 | C   | VAL | B | 151 | -1.982 | 54.275 | 74.123 | 1.00 | 16.15 | C |
| ATOM | 4479 | O   | VAL | B | 151 | -0.989 | 53.592 | 74.393 | 1.00 | 14.37 | O |
| ATOM | 4480 | CB  | VAL | B | 151 | -3.672 | 52.965 | 75.442 | 1.00 | 16.44 | C |
| ATOM | 4481 | CG1 | VAL | B | 151 | -3.503 | 53.976 | 76.578 | 1.00 | 13.41 | C |
| ATOM | 4482 | CG2 | VAL | B | 151 | -5.101 | 52.412 | 75.440 | 1.00 | 15.70 | C |
| ATOM | 4483 | N   | ALA | B | 152 | -1.918 | 55.573 | 73.831 | 1.00 | 16.03 | N |
| ATOM | 4484 | CA  | ALA | B | 152 | -0.654 | 56.294 | 73.772 | 1.00 | 14.95 | C |
| ATOM | 4485 | C   | ALA | B | 152 | -0.424 | 57.293 | 74.892 | 1.00 | 15.48 | C |
| ATOM | 4486 | O   | ALA | B | 152 | -1.360 | 57.885 | 75.420 | 1.00 | 14.85 | O |
| ATOM | 4487 | CB  | ALA | B | 152 | -0.526 | 56.991 | 72.426 | 1.00 | 15.28 | C |
| ATOM | 4488 | N   | ASP | B | 153 |  0.856 | 57.471 | 75.213 | 1.00 | 14.80 | N |
| ATOM | 4489 | CA  | ASP | B | 153 |  1.348 | 58.350 | 76.264 | 1.00 | 15.72 | C |
| ATOM | 4490 | C   | ASP | B | 153 |  1.358 | 59.813 | 75.811 | 1.00 | 17.20 | C |
| ATOM | 4491 | O   | ASP | B | 153 |  2.061 | 60.171 | 74.869 | 1.00 | 17.55 | O |
| ATOM | 4492 | CB  | ASP | B | 153 |  2.778 | 57.927 | 76.615 | 1.00 | 14.56 | C |
| ATOM | 4493 | CG  | ASP | B | 153 |  3.292 | 58.547 | 77.900 | 1.00 | 16.30 | C |
| ATOM | 4494 | OD1 | ASP | B | 153 |  2.846 | 59.650 | 78.286 | 1.00 | 15.78 | O |
| ATOM | 4495 | OD2 | ASP | B | 153 |  4.177 | 57.919 | 78.520 | 1.00 | 19.15 | O |
| ATOM | 4496 | N   | GLY | B | 154 |  0.587 | 60.656 | 76.486 | 1.00 | 18.36 | N |
| ATOM | 4497 | CA  | GLY | B | 154 |  0.565 | 62.065 | 76.132 | 1.00 | 19.14 | C |
| ATOM | 4498 | C   | GLY | B | 154 |  1.440 | 62.818 | 77.115 | 1.00 | 19.96 | C |
| ATOM | 4499 | O   | GLY | B | 154 |  1.599 | 64.037 | 77.026 | 1.00 | 21.30 | O |
| ATOM | 4500 | N   | GLU | B | 155 |  2.011 | 62.072 | 78.058 | 1.00 | 19.76 | N |
| ATOM | 4501 | CA  | GLU | B | 155 |  2.875 | 62.636 | 79.090 | 1.00 | 20.34 | C |
| ATOM | 4502 | C   | GLU | B | 155 |  2.226 | 63.827 | 79.776 | 1.00 | 19.45 | C |
| ATOM | 4503 | O   | GLU | B | 155 |  1.084 | 63.728 | 80.224 | 1.00 | 19.37 | O |
| ATOM | 4504 | CB  | GLU | B | 155 |  4.232 | 63.015 | 78.494 | 1.00 | 20.22 | C |
| ATOM | 4505 | CG  | GLU | B | 155 |  5.085 | 61.785 | 78.204 | 1.00 | 25.71 | C |
| ATOM | 4506 | CD  | GLU | B | 155 |  6.508 | 62.116 | 77.821 | 1.00 | 26.49 | C |
| ATOM | 4507 | OE1 | GLU | B | 155 |  7.019 | 63.155 | 78.282 | 1.00 | 29.54 | O |
| ATOM | 4508 | OE2 | GLU | B | 155 |  7.120 | 61.328 | 77.077 | 1.00 | 26.08 | O |
| ATOM | 4509 | N   | ALA | B | 156 |  2.936 | 64.948 | 79.855 | 1.00 | 20.16 | N |
| ATOM | 4510 | CA  | ALA | B | 156 |  2.393 | 66.135 | 80.503 | 1.00 | 19.74 | C |
| ATOM | 4511 | C   | ALA | B | 156 |  2.000 | 67.224 | 79.503 | 1.00 | 21.74 | C |
| ATOM | 4512 | O   | ALA | B | 156 |  1.900 | 68.402 | 79.861 | 1.00 | 22.51 | O |
| ATOM | 4513 | CB  | ALA | B | 156 |  3.388 | 66.678 | 81.507 | 1.00 | 18.49 | C |
| ATOM | 4514 | N   | GLY | B | 157 |  1.781 | 66.828 | 78.251 | 1.00 | 21.51 | N |
| ATOM | 4515 | CA  | GLY | B | 157 |  1.372 | 67.782 | 77.231 | 1.00 | 19.82 | C |
| ATOM | 4516 | C   | GLY | B | 157 |  2.447 | 68.631 | 76.568 | 1.00 | 21.31 | C |
| ATOM | 4517 | O   | GLY | B | 157 |  2.152 | 69.355 | 75.607 | 1.00 | 20.25 | O |
| ATOM | 4518 | N   | PHE | B | 158 |  3.681 | 68.568 | 77.071 | 1.00 | 19.36 | N |
| ATOM | 4519 | CA  | PHE | B | 158 |  4.778 | 69.342 | 76.494 | 1.00 | 20.04 | C |

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ATOM   4520  C    PHE B 158       4.507  70.850  76.500  1.00 20.60           C
ATOM   4521  O    PHE B 158       4.834  71.551  75.547  1.00 21.75           O
ATOM   4522  CB   PHE B 158       5.036  68.870  75.061  1.00 18.08           C
ATOM   4523  CG   PHE B 158       5.546  67.455  74.972  1.00 19.58           C
ATOM   4524  CD1  PHE B 158       6.904  67.180  75.117  1.00 18.78           C
ATOM   4525  CD2  PHE B 158       4.670  66.396  74.758  1.00 18.09           C
ATOM   4526  CE1  PHE B 158       7.388  65.869  75.049  1.00 18.50           C
ATOM   4527  CE2  PHE B 158       5.147  65.074  74.689  1.00 20.02           C
ATOM   4528  CZ   PHE B 158       6.508  64.816  74.835  1.00 16.44           C
ATOM   4529  N    GLY B 159       3.912  71.340  77.581  1.00 21.09           N
ATOM   4530  CA   GLY B 159       3.612  72.755  77.682  1.00 21.25           C
ATOM   4531  C    GLY B 159       2.230  73.010  78.263  1.00 21.72           C
ATOM   4532  O    GLY B 159       1.787  72.303  79.169  1.00 22.96           O
ATOM   4533  N    GLY B 160       1.541  74.013  77.730  1.00 20.25           N
ATOM   4534  CA   GLY B 160       0.220  74.347  78.229  1.00 20.76           C
ATOM   4535  C    GLY B 160      -0.924  73.611  77.561  1.00 21.41           C
ATOM   4536  O    GLY B 160      -0.729  72.597  76.888  1.00 22.38           O
ATOM   4537  N    ALA B 161      -2.130  74.137  77.741  1.00 21.88           N
ATOM   4538  CA   ALA B 161      -3.326  73.537  77.168  1.00 21.09           C
ATOM   4539  C    ALA B 161      -3.298  73.484  75.641  1.00 20.73           C
ATOM   4540  O    ALA B 161      -3.903  72.595  75.038  1.00 21.66           O
ATOM   4541  CB   ALA B 161      -4.567  74.295  77.646  1.00 21.34           C
ATOM   4542  N    LEU B 162      -2.601  74.424  75.009  1.00 20.30           N
ATOM   4543  CA   LEU B 162      -2.534  74.431  73.548  1.00 20.83           C
ATOM   4544  C    LEU B 162      -1.610  73.325  73.036  1.00 20.10           C
ATOM   4545  O    LEU B 162      -1.883  72.708  72.008  1.00 19.63           O
ATOM   4546  CB   LEU B 162      -2.067  75.801  73.038  1.00 21.45           C
ATOM   4547  CG   LEU B 162      -2.992  76.974  73.398  1.00 21.75           C
ATOM   4548  CD1  LEU B 162      -2.414  78.259  72.838  1.00 18.23           C
ATOM   4549  CD2  LEU B 162      -4.397  76.733  72.843  1.00 21.00           C
ATOM   4550  N    ASN B 163      -0.519  73.077  73.756  1.00 19.68           N
ATOM   4551  CA   ASN B 163       0.420  72.020  73.385  1.00 17.50           C
ATOM   4552  C    ASN B 163      -0.298  70.685  73.570  1.00 17.99           C
ATOM   4553  O    ASN B 163      -0.168  69.772  72.755  1.00 15.19           O
ATOM   4554  CB   ASN B 163       1.656  72.079  74.287  1.00 18.26           C
ATOM   4555  CG   ASN B 163       2.447  73.360  74.106  1.00 17.18           C
ATOM   4556  OD1  ASN B 163       3.209  73.508  73.144  1.00 19.12           O
ATOM   4557  ND2  ASN B 163       2.256  74.298  75.017  1.00 13.50           N
ATOM   4558  N    VAL B 164      -1.054  70.586  74.663  1.00 19.26           N
ATOM   4559  CA   VAL B 164      -1.835  69.389  74.969  1.00 18.12           C
ATOM   4560  C    VAL B 164      -2.808  69.158  73.822  1.00 17.31           C
ATOM   4561  O    VAL B 164      -2.964  68.039  73.328  1.00 18.74           O
ATOM   4562  CB   VAL B 164      -2.667  69.577  76.272  1.00 18.42           C
ATOM   4563  CG1  VAL B 164      -3.702  68.456  76.412  1.00 16.64           C
ATOM   4564  CG2  VAL B 164      -1.744  69.607  77.475  1.00 16.33           C
ATOM   4565  N    TYR B 165      -3.458  70.237  73.401  1.00 17.95           N
ATOM   4566  CA   TYR B 165      -4.434  70.171  72.324  1.00 17.28           C
ATOM   4567  C    TYR B 165      -3.817  69.672  71.028  1.00 16.10           C
ATOM   4568  O    TYR B 165      -4.373  68.792  70.385  1.00 16.41           O
ATOM   4569  CB   TYR B 165      -5.087  71.541  72.106  1.00 16.59           C
ATOM   4570  CG   TYR B 165      -6.112  71.555  70.988  1.00 18.13           C
ATOM   4571  CD1  TYR B 165      -5.716  71.577  69.647  1.00 16.08           C
ATOM   4572  CD2  TYR B 165      -7.480  71.510  71.269  1.00 15.76           C
ATOM   4573  CE1  TYR B 165      -6.657  71.551  68.615  1.00 19.44           C
ATOM   4574  CE2  TYR B 165      -8.427  71.487  70.245  1.00 17.55           C
ATOM   4575  CZ   TYR B 165      -8.011  71.506  68.921  1.00 19.86           C
ATOM   4576  OH   TYR B 165      -8.941  71.470  67.899  1.00 23.51           O
ATOM   4577  N    GLU B 166      -2.671  70.222  70.640  1.00 16.50           N
ATOM   4578  CA   GLU B 166      -2.034  69.786  69.402  1.00 15.58           C
ATOM   4579  C    GLU B 166      -1.563  68.337  69.478  1.00 16.44           C
ATOM   4580  O    GLU B 166      -1.642  67.604  68.486  1.00 16.37           O
ATOM   4581  CB   GLU B 166      -0.863  70.704  69.040  1.00 16.97           C
ATOM   4582  CG   GLU B 166      -1.286  72.057  68.510  1.00 14.73           C
ATOM   4583  CD   GLU B 166      -2.169  71.951  67.282  1.00 18.17           C
ATOM   4584  OE1  GLU B 166      -1.736  71.346  66.277  1.00 15.92           O
ATOM   4585  OE2  GLU B 166      -3.301  72.477  67.320  1.00 17.70           O
ATOM   4586  N    LEU B 167      -1.074  67.911  70.641  1.00 15.45           N
ATOM   4587  CA   LEU B 167      -0.638  66.519  70.772  1.00 17.33           C
ATOM   4588  C    LEU B 167      -1.841  65.574  70.599  1.00 17.65           C
ATOM   4589  O    LEU B 167      -1.787  64.618  69.816  1.00 17.89           O
ATOM   4590  CB   LEU B 167       0.031  66.281  72.131  1.00 14.73           C
ATOM   4591  CG   LEU B 167       0.512  64.853  72.421  1.00 15.89           C
ATOM   4592  CD1  LEU B 167       1.323  64.303  71.253  1.00 12.01           C
ATOM   4593  CD2  LEU B 167       1.352  64.862  73.700  1.00 14.13           C
ATOM   4594  N    GLN B 168      -2.930  65.842  71.318  1.00 16.59           N
ATOM   4595  CA   GLN B 168      -4.122  65.004  71.195  1.00 16.23           C
ATOM   4596  C    GLN B 168      -4.566  64.952  69.733  1.00 16.07           C
ATOM   4597  O    GLN B 168      -4.881  63.885  69.202  1.00 16.37           O
ATOM   4598  CB   GLN B 168      -5.267  65.552  72.056  1.00 17.20           C
ATOM   4599  CG   GLN B 168      -6.576  64.748  71.944  1.00 14.92           C
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ATOM   4600  CD  GLN B 168      -6.519  63.408  72.658  1.00 14.03           C
ATOM   4601  OE1 GLN B 168      -5.524  62.692  72.588  1.00 12.69           O
ATOM   4602  NE2 GLN B 168      -7.601  63.061  73.340  1.00 12.72           N
ATOM   4603  N   LYS B 169      -4.585  66.111  69.083  1.00 15.35           N
ATOM   4604  CA  LYS B 169      -4.987  66.191  67.682  1.00 17.03           C
ATOM   4605  C   LYS B 169      -4.093  65.347  66.774  1.00 16.00           C
ATOM   4606  O   LYS B 169      -4.576  64.694  65.847  1.00 17.82           O
ATOM   4607  CB  LYS B 169      -4.974  67.654  67.203  1.00 16.60           C
ATOM   4608  CG  LYS B 169      -5.297  67.843  65.714  1.00 15.11           C
ATOM   4609  CD  LYS B 169      -5.395  69.328  65.368  1.00 18.34           C
ATOM   4610  CE  LYS B 169      -5.445  69.576  63.863  1.00 19.53           C
ATOM   4611  NZ  LYS B 169      -5.664  71.031  63.572  1.00 21.63           N
ATOM   4612  N   ALA B 170      -2.791  65.361  67.041  1.00 15.23           N
ATOM   4613  CA  ALA B 170      -1.853  64.602  66.233  1.00 14.18           C
ATOM   4614  C   ALA B 170      -1.978  63.104  66.499  1.00 14.84           C
ATOM   4615  O   ALA B 170      -1.849  62.291  65.581  1.00 17.33           O
ATOM   4616  CB  ALA B 170      -0.433  65.073  66.504  1.00 14.61           C
ATOM   4617  N   LEU B 171      -2.218  62.740  67.754  1.00 14.28           N
ATOM   4618  CA  LEU B 171      -2.371  61.336  68.121  1.00 12.45           C
ATOM   4619  C   LEU B 171      -3.598  60.787  67.406  1.00 15.81           C
ATOM   4620  O   LEU B 171      -3.600  59.649  66.929  1.00 16.11           O
ATOM   4621  CB  LEU B 171      -2.540  61.192  69.634  1.00 12.89           C
ATOM   4622  CG  LEU B 171      -1.299  61.472  70.496  1.00 12.15           C
ATOM   4623  CD1 LEU B 171      -1.680  61.550  71.955  1.00 11.23           C
ATOM   4624  CD2 LEU B 171      -0.265  60.375  70.280  1.00 13.64           C
ATOM   4625  N   ILE B 172      -4.643  61.605  67.322  1.00 15.24           N
ATOM   4626  CA  ILE B 172      -5.861  61.189  66.646  1.00 15.00           C
ATOM   4627  C   ILE B 172      -5.604  61.055  65.141  1.00 15.46           C
ATOM   4628  O   ILE B 172      -5.964  60.050  64.529  1.00 15.69           O
ATOM   4629  CB  ILE B 172      -7.002  62.191  66.923  1.00 15.04           C
ATOM   4630  CG1 ILE B 172      -7.373  62.121  68.408  1.00 13.85           C
ATOM   4631  CG2 ILE B 172      -8.203  61.899  66.032  1.00 13.78           C
ATOM   4632  CD1 ILE B 172      -8.425  63.104  68.842  1.00 12.44           C
ATOM   4633  N   ALA B 173      -4.969  62.055  64.542  1.00 15.94           N
ATOM   4634  CA  ALA B 173      -4.675  61.988  63.116  1.00 15.68           C
ATOM   4635  C   ALA B 173      -3.911  60.706  62.779  1.00 16.43           C
ATOM   4636  O   ALA B 173      -4.065  60.164  61.686  1.00 16.55           O
ATOM   4637  CB  ALA B 173      -3.863  63.195  62.690  1.00 17.35           C
ATOM   4638  N   ALA B 174      -3.099  60.224  63.723  1.00 15.47           N
ATOM   4639  CA  ALA B 174      -2.302  59.011  63.521  1.00 15.30           C
ATOM   4640  C   ALA B 174      -3.100  57.730  63.753  1.00 15.49           C
ATOM   4641  O   ALA B 174      -2.626  56.633. 63.432  1.00 13.38           O
ATOM   4642  CB  ALA B 174      -1.071  59.029  64.431  1.00 14.92           C
ATOM   4643  N   GLY B 175      -4.290  57.878  64.334  1.00 14.02           N
ATOM   4644  CA  GLY B 175      -5.163  56.743  64.570  1.00 14.06           C
ATOM   4645  C   GLY B 175      -5.162  56.156  65.964  1.00 15.61           C
ATOM   4646  O   GLY B 175      -5.419  54.961  66.125  1.00 15.81           O
ATOM   4647  N   VAL B 176      -4.895  56.982  66.970  1.00 15.20           N
ATOM   4648  CA  VAL B 176      -4.849  56.511  68.349  1.00 15.75           C
ATOM   4649  C   VAL B 176      -6.266  56.244  68.869  1.00 17.56           C
ATOM   4650  O   VAL B 176      -7.231  56.853  68.402  1.00 17.96           O
ATOM   4651  CB  VAL B 176      -4.128  57.543  69.260  1.00 15.36           C
ATOM   4652  CG1 VAL B 176      -5.075  58.665  69.651  1.00 13.85           C
ATOM   4653  CG2 VAL B 176      -3.566  56.848  70.489  1.00 16.53           C
ATOM   4654  N   ALA B 177      -6.385  55.319  69.818  1.00 16.43           N
ATOM   4655  CA  ALA B 177      -7.682  54.970  70.393  1.00 16.93           C
ATOM   4656  C   ALA B 177      -7.872  55.622  71.759  1.00 16.86           C
ATOM   4657  O   ALA B 177      -8.986  55.979  72.130  1.00 16.85           O
ATOM   4658  CB  ALA B 177      -7.812  53.457  70.521  1.00 15.59           C
ATOM   4659  N   GLY B 178      -6.775  55.767  72.499  1.00 16.56           N
ATOM   4660  CA  GLY B 178      -6.827  56.375  73.815  1.00 16.68           C
ATOM   4661  C   GLY B 178      -5.518  57.078  74.134  1.00 18.97           C
ATOM   4662  O   GLY B 178      -4.481  56.732  73.575  1.00 20.04           O
ATOM   4663  N   SER B 179      -5.560  58.066  75.024  1.00 18.51           N
ATOM   4664  CA  SER B 179      -4.359  58.801  75.399  1.00 19.35           C
ATOM   4665  C   SER B 179      -4.416  59.146  76.881  1.00 19.83           C
ATOM   4666  O   SER B 179      -5.496  59.434  77.408  1.00 19.91           O
ATOM   4667  CB  SER B 179      -4.247  60.087  74.564  1.00 19.42           C
ATOM   4668  OG  SER B 179      -5.328  60.969  74.830  1.00 19.52           O
ATOM   4669  N   HIS B 180      -3.266  59.102  77.556  1.00 19.02           N
ATOM   4670  CA  HIS B 180      -3.214  59.427  78.981  1.00 19.22           C
ATOM   4671  C   HIS B 180      -2.395  60.689  79.254  1.00 19.25           C
ATOM   4672  O   HIS B 180      -1.430  60.983  78.552  1.00 20.65           O
ATOM   4673  CB  HIS B 180      -2.696  58.234  79.813  1.00 17.43           C
ATOM   4674  CG  HIS B 180      -1.251  57.886  79.600  1.00 17.89           C
ATOM   4675  ND1 HIS B 180      -0.853  56.732  78.953  1.00 19.62           N
ATOM   4676  CD2 HIS B 180      -0.115  58.475  80.044  1.00 15.47           C
ATOM   4677  CE1 HIS B 180       0.463  56.622  79.015  1.00 16.09           C
ATOM   4678  NE2 HIS B 180       0.935  57.667  79.672  1.00 16.88           N
ATOM   4679  N   TRP B 181      -2.801  61.436  80.278  1.00 18.48           N
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ATOM   4680  CA  TRP B 181    -2.157  62.699  80.630  1.00 17.41       C
ATOM   4681  C   TRP B 181    -1.887  62.764  82.133  1.00 16.88       C
ATOM   4682  O   TRP B 181    -2.753  62.417  82.941  1.00 14.88       O
ATOM   4683  CB  TRP B 181    -3.065  63.858  80.184  1.00 18.35       C
ATOM   4684  CG  TRP B 181    -3.577  63.663  78.775  1.00 18.73       C
ATOM   4685  CD1 TRP B 181    -4.573  62.809  78.375  1.00 18.57       C
ATOM   4686  CD2 TRP B 181    -3.010  64.204  77.571  1.00 18.67       C
ATOM   4687  NE1 TRP B 181    -4.649  62.776  77.002  1.00 20.59       N
ATOM   4688  CE2 TRP B 181    -3.702  63.622  76.483  1.00 19.71       C
ATOM   4689  CE3 TRP B 181    -1.980  65.119  77.306  1.00 18.25       C
ATOM   4690  CZ2 TRP B 181    -3.396  63.924  75.148  1.00 18.95       C
ATOM   4691  CZ3 TRP B 181    -1.676  65.420  75.973  1.00 17.40       C
ATOM   4692  CH2 TRP B 181    -2.384  64.821  74.916  1.00 17.88       C
ATOM   4693  N   GLU B 182    -0.690  63.220  82.499  1.00 16.98       N
ATOM   4694  CA  GLU B 182    -0.290  63.298  83.905  1.00 18.54       C
ATOM   4695  C   GLU B 182    -0.206  64.713  84.465  1.00 18.53       C
ATOM   4696  O   GLU B 182     0.137  65.658  83.757  1.00 15.62       O
ATOM   4697  CB  GLU B 182     1.055  62.596  84.097  1.00 17.15       C
ATOM   4698  CG  GLU B 182     2.137  63.156  83.205  1.00 19.26       C
ATOM   4699  CD  GLU B 182     3.123  62.104  82.742  1.00 21.68       C
ATOM   4700  OE1 GLU B 182     2.698  60.967  82.440  1.00 20.38       O
ATOM   4701  OE2 GLU B 182     4.325  62.422  82.659  1.00 25.38       O
ATOM   4702  N   ASP B 183    -0.494  64.836  85.760  1.00 21.00       N
ATOM   4703  CA  ASP B 183    -0.480  66.124  86.442  1.00 21.02       C
ATOM   4704  C   ASP B 183     0.892  66.612  86.890  1.00 21.64       C
ATOM   4705  O   ASP B 183     1.047  67.096  88.010  1.00 23.19       O
ATOM   4706  CB  ASP B 183    -1.441  66.103  87.644  1.00 19.75       C
ATOM   4707  CG  ASP B 183    -1.242  64.889  88.547  1.00 23.35       C
ATOM   4708  OD1 ASP B 183    -0.241  64.156  88.373  1.00 22.65       O
ATOM   4709  OD2 ASP B 183    -2.093  64.670  89.445  1.00 22.62       O
ATOM   4710  N   GLN B 184     1.882  66.496  86.010  1.00 23.37       N
ATOM   4711  CA  GLN B 184     3.242  66.954  86.304  1.00 23.85       C
ATOM   4712  C   GLN B 184     3.562  68.209  85.508  1.00 25.22       C
ATOM   4713  O   GLN B 184     2.945  68.476  84.469  1.00 25.94       O
ATOM   4714  CB  GLN B 184     4.278  65.904  85.909  1.00 23.49       C
ATOM   4715  CG  GLN B 184     4.330  64.658  86.751  1.00 22.58       C
ATOM   4716  CD  GLN B 184     5.499  63.780  86.357  1.00 22.87       C
ATOM   4717  OE1 GLN B 184     6.658  64.198  86.437  1.00 22.65       O
ATOM   4718  NE2 GLN B 184     5.205  62.560  85.918  1.00 22.75       N
ATOM   4719  N   LEU B 185     4.538  68.974  85.987  1.00 25.00       N
ATOM   4720  CA  LEU B 185     4.972  70.174  85.279  1.00 24.60       C
ATOM   4721  C   LEU B 185     5.720  69.645  84.057  1.00 25.16       C
ATOM   4722  O   LEU B 185     6.656  68.861  84.200  1.00 26.53       O
ATOM   4723  CB  LEU B 185     5.915  71.000  86.157  1.00 23.53       C
ATOM   4724  CG  LEU B 185     6.573  72.212  85.497  1.00 23.27       C
ATOM   4725  CD1 LEU B 185     5.512  73.190  85.032  1.00 22.40       C
ATOM   4726  CD2 LEU B 185     7.528  72.870  86.475  1.00 21.97       C
ATOM   4727  N   ALA B 186     5.305  70.062  82.863  1.00 25.26       N
ATOM   4728  CA  ALA B 186     5.920  69.592  81.621  1.00 25.50       C
ATOM   4729  C   ALA B 186     7.434  69.772  81.542  1.00 26.05       C
ATOM   4730  O   ALA B 186     8.159  68.830  81.215  1.00 26.21       O
ATOM   4731  CB  ALA B 186     5.262  70.269  80.425  1.00 22.92       C
ATOM   4732  N   SER B 187     7.902  70.978  81.844  1.00 25.64       N
ATOM   4733  CA  SER B 187     9.325  71.299  81.783  1.00 26.13       C
ATOM   4734  C   SER B 187    10.218  70.509  82.749  1.00 26.58       C
ATOM   4735  O   SER B 187    11.443  70.497  82.594  1.00 27.68       O
ATOM   4736  CB  SER B 187     9.521  72.800  82.013  1.00 23.89       C
ATOM   4737  OG  SER B 187     8.994  73.178  83.272  1.00 24.24       O
ATOM   4738  N   GLU B 188     9.620  69.859  83.744  1.00 26.74       N
ATOM   4739  CA  GLU B 188    10.394  69.072  84.705  1.00 27.40       C
ATOM   4740  C   GLU B 188     9.844  67.652  84.779  1.00 26.73       C
ATOM   4741  O   GLU B 188    10.097  66.933  85.748  1.00 25.98       O
ATOM   4742  CB  GLU B 188    10.318  69.688  86.104  1.00 28.73       C
ATOM   4743  CG  GLU B 188    10.879  71.092  86.240  1.00 32.77       C
ATOM   4744  CD  GLU B 188    12.345  71.177  85.877  1.00 35.15       C
ATOM   4745  OE1 GLU B 188    13.093  70.227  86.208  1.00 37.85       O
ATOM   4746  OE2 GLU B 188    12.749  72.196  85.273  1.00 33.03       O
ATOM   4747  N   LYS B 189     9.089  67.255  83.760  1.00 26.50       N
ATOM   4748  CA  LYS B 189     8.482  65.928  83.737  1.00 27.57       C
ATOM   4749  C   LYS B 189     9.475  64.831  84.077  1.00 29.62       C
ATOM   4750  O   LYS B 189    10.599  64.802  83.568  1.00 30.79       O
ATOM   4751  CB  LYS B 189     7.848  65.650  82.371  1.00 26.11       C
ATOM   4752  CG  LYS B 189     7.157  64.289  82.241  1.00 24.60       C
ATOM   4753  CD  LYS B 189     8.142  63.173  81.934  1.00 25.55       C
ATOM   4754  CE  LYS B 189     7.439  61.925  81.400  1.00 26.48       C
ATOM   4755  NZ  LYS B 189     6.498  61.309  82.374  1.00 22.06       N
ATOM   4756  N   LYS B 190     9.047  63.931  84.950  1.00 30.32       N
ATOM   4757  CA  LYS B 190     9.877  62.816  85.370  1.00 31.53       C
ATOM   4758  C   LYS B 190     9.118  61.529  85.148  1.00 32.25       C
ATOM   4759  O   LYS B 190     7.885  61.508  85.161  1.00 32.42       O
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ATOM   4760  CB  LYS B 190      10.219  62.910  86.858  1.00 30.82           C
ATOM   4761  CG  LYS B 190      11.103  64.065  87.243  1.00 32.20           C
ATOM   4762  CD  LYS B 190      12.457  63.964  86.581  1.00 33.27           C
ATOM   4763  CE  LYS B 190      13.365  65.060  87.087  1.00 33.84           C
ATOM   4764  NZ  LYS B 190      12.743  66.404  86.919  1.00 35.77           N
ATOM   4765  N   SER B 191       9.862  60.454  84.939  1.00 31.87           N
ATOM   4766  CA  SER B 191       9.248  59.155  84.764  1.00 32.90           C
ATOM   4767  C   SER B 191       8.520  58.868  86.078  1.00 31.15           C
ATOM   4768  O   SER B 191       8.972  59.281  87.149  1.00 30.44           O
ATOM   4769  CB  SER B 191      10.323  58.103  84.512  1.00 33.18           C
ATOM   4770  OG  SER B 191       9.733  56.855  84.236  1.00 37.43           O
ATOM   4771  N   GLY B 192       7.394  58.173  85.993  1.00 30.71           N
ATOM   4772  CA  GLY B 192       6.621  57.862  87.185  1.00 30.58           C
ATOM   4773  C   GLY B 192       7.400  57.288  88.356  1.00 29.41           C
ATOM   4774  O   GLY B 192       7.025  57.483  89.515  1.00 27.51           O
ATOM   4775  N   HIS B 193       8.490  56.588  88.068  1.00 29.83           N
ATOM   4776  CA  HIS B 193       9.281  55.986  89.131  1.00 30.80           C
ATOM   4777  C   HIS B 193      10.669  56.584  89.336  1.00 31.50           C
ATOM   4778  O   HIS B 193      11.562  55.942  89.898  1.00 31.91           O
ATOM   4779  CB  HIS B 193       9.350  54.473  88.912  1.00 29.51           C
ATOM   4780  CG  HIS B 193       7.999  53.835  88.857  1.00 30.60           C
ATOM   4781  ND1 HIS B 193       7.353  53.564  87.670  1.00 29.30           N
ATOM   4782  CD2 HIS B 193       7.122  53.523  89.842  1.00 30.47           C
ATOM   4783  CE1 HIS B 193       6.136  53.117  87.926  1.00 32.28           C
ATOM   4784  NE2 HIS B 193       5.970  53.083  89.237  1.00 31.28           N
ATOM   4785  N   LEU B 194      10.834  57.823  88.879  1.00 30.54           N
ATOM   4786  CA  LEU B 194      12.080  58.561  89.046  1.00 29.52           C
ATOM   4787  C   LEU B 194      11.734  59.667  90.038  1.00 29.47           C
ATOM   4788  O   LEU B 194      10.581  60.092  90.108  1.00 29.80           O
ATOM   4789  CB  LEU B 194      12.537  59.187  87.721  1.00 28.00           C
ATOM   4790  CG  LEU B 194      13.106  58.290  86.618  1.00 27.63           C
ATOM   4791  CD1 LEU B 194      13.476  59.151  85.413  1.00 25.95           C
ATOM   4792  CD2 LEU B 194      14.330  57.550  87.119  1.00 24.39           C
ATOM   4793  N   GLY B 195      12.717  60.128  90.803  1.00 28.66           N
ATOM   4794  CA  GLY B 195      12.461  61.183  91.768  1.00 28.34           C
ATOM   4795  C   GLY B 195      12.417  62.567  91.140  1.00 29.29           C
ATOM   4796  O   GLY B 195      12.477  62.709  89.912  1.00 30.74           O
ATOM   4797  N   GLY B 196      12.293  63.587  91.986  1.00 28.08           N
ATOM   4798  CA  GLY B 196      12.265  64.960  91.515  1.00 28.42           C
ATOM   4799  C   GLY B 196      11.058  65.360  90.721  1.00 28.07           C
ATOM   4800  O   GLY B 196      11.132  66.182  89.807  1.00 29.64           O
ATOM   4801  N   LYS B 197       9.886  64.792  91.066  1.00 26.01           N
ATOM   4802  CA  LYS B 197       8.647  65.110  90.365  1.00 24.23           C
ATOM   4803  C   LYS B 197       7.963  66.354  90.922  1.00 23.77           C
ATOM   4804  O   LYS B 197       7.913  66.566  92.135  1.00 24.22           O
ATOM   4805  CB  LYS B 197       7.681  63.919  90.412  1.00 23.29           C
ATOM   4806  CG  LYS B 197       8.202  62.695  89.668  1.00 24.17           C
ATOM   4807  CD  LYS B 197       7.099  61.707  89.330  1.00 23.21           C
ATOM   4808  CE  LYS B 197       6.480  61.091  90.572  1.00 23.19           C
ATOM   4809  NZ  LYS B 197       5.473  60.049  90.218  1.00 23.57           N
ATOM   4810  N   VAL B 198       7.446  67.176  90.014  1.00 22.31           N
ATOM   4811  CA  VAL B 198       6.753  68.405  90.365  1.00 20.91           C
ATOM   4812  C   VAL B 198       5.330  68.358  89.793  1.00 20.51           C
ATOM   4813  O   VAL B 198       5.139  68.286  88.580  1.00 20.10           O
ATOM   4814  CB  VAL B 198       7.503  69.637  89.792  1.00 22.04           C
ATOM   4815  CG1 VAL B 198       6.814  70.923  90.217  1.00 21.79           C
ATOM   4816  CG2 VAL B 198       8.947  69.628  90.262  1.00 20.17           C
ATOM   4817  N   LEU B 199       4.338  68.382  90.675  1.00 20.44           N
ATOM   4818  CA  LEU B 199       2.947  68.344  90.257  1.00 19.52           C
ATOM   4819  C   LEU B 199       2.489  69.757  89.913  1.00 20.89           C
ATOM   4820  O   LEU B 199       3.115  70.742  90.307  1.00 21.76           O
ATOM   4821  CB  LEU B 199       2.052  67.807  91.383  1.00 16.85           C
ATOM   4822  CG  LEU B 199       2.345  66.474  92.084  1.00 19.30           C
ATOM   4823  CD1 LEU B 199       1.412  66.339  93.279  1.00 19.05           C
ATOM   4824  CD2 LEU B 199       2.161  65.298  91.140  1.00 18.18           C
ATOM   4825  N   ILE B 200       1.400  69.848  89.159  1.00 21.20           N
ATOM   4826  CA  ILE B 200       0.823  71.133  88.814  1.00 21.49           C
ATOM   4827  C   ILE B 200      -0.515  71.188  89.559  1.00 20.69           C
ATOM   4828  O   ILE B 200      -1.003  70.160  90.041  1.00 18.92           O
ATOM   4829  CB  ILE B 200       0.638  71.281  87.270  1.00 23.12           C
ATOM   4830  CG1 ILE B 200       0.042  70.009  86.657  1.00 25.83           C
ATOM   4831  CG2 ILE B 200       1.981  71.542  86.618  1.00 24.37           C
ATOM   4832  CD1 ILE B 200      -1.450  69.852  86.849  1.00 26.87           C
ATOM   4833  N   PRO B 201      -1.103  72.386  89.703  1.00 19.74           N
ATOM   4834  CA  PRO B 201      -2.384  72.517  90.404  1.00 21.89           C
ATOM   4835  C   PRO B 201      -3.459  71.585  89.848  1.00 22.61           C
ATOM   4836  O   PRO B 201      -3.474  71.282  88.658  1.00 22.84           O
ATOM   4837  CB  PRO B 201      -2.730  73.986  90.207  1.00 20.63           C
ATOM   4838  CG  PRO B 201      -1.387  74.628  90.212  1.00 21.02           C
ATOM   4839  CD  PRO B 201      -0.583  73.709  89.323  1.00 19.15           C
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| ATOM | 4840 | N   | THR B 202 | -4.350  | 71.135 | 90.725 | 1.00 | 23.45 | N |
| ATOM | 4841 | CA  | THR B 202 | -5.428  | 70.232 | 90.346 | 1.00 | 21.62 | C |
| ATOM | 4842 | C   | THR B 202 | -6.241  | 70.785 | 89.187 | 1.00 | 21.93 | C |
| ATOM | 4843 | O   | THR B 202 | -6.560  | 70.065 | 88.248 | 1.00 | 21.83 | O |
| ATOM | 4844 | CB  | THR B 202 | -6.358  | 69.964 | 91.546 | 1.00 | 21.82 | C |
| ATOM | 4845 | OG1 | THR B 202 | -5.670  | 69.136 | 92.489 | 1.00 | 23.61 | O |
| ATOM | 4846 | CG2 | THR B 202 | -7.644  | 69.266 | 91.111 | 1.00 | 19.50 | C |
| ATOM | 4847 | N   | GLN B 203 | -6.557  | 72.071 | 89.250 | 1.00 | 22.15 | N |
| ATOM | 4848 | CA  | GLN B 203 | -7.336  | 72.711 | 88.205 | 1.00 | 22.97 | C |
| ATOM | 4849 | C   | GLN B 203 | -6.574  | 72.758 | 86.885 | 1.00 | 23.01 | C |
| ATOM | 4850 | O   | GLN B 203 | -7.167  | 72.653 | 85.811 | 1.00 | 23.03 | O |
| ATOM | 4851 | CB  | GLN B 203 | -7.719  | 74.127 | 88.632 | 1.00 | 22.56 | C |
| ATOM | 4852 | CG  | GLN B 203 | -8.739  | 74.802 | 87.720 | 1.00 | 25.78 | C |
| ATOM | 4853 | CD  | GLN B 203 | -9.975  | 73.946 | 87.466 | 1.00 | 27.57 | C |
| ATOM | 4854 | OE1 | GLN B 203 | -10.509 | 73.316 | 88.380 | 1.00 | 27.98 | O |
| ATOM | 4855 | NE2 | GLN B 203 | -10.442 | 73.932 | 86.216 | 1.00 | 28.05 | N |
| ATOM | 4856 | N   | GLN B 204 | -5.259  | 72.909 | 86.956 | 1.00 | 21.49 | N |
| ATOM | 4857 | CA  | GLN B 204 | -4.483  | 72.966 | 85.733 | 1.00 | 22.03 | C |
| ATOM | 4858 | C   | GLN B 204 | -4.577  | 71.648 | 84.987 | 1.00 | 22.11 | C |
| ATOM | 4859 | O   | GLN B 204 | -4.649  | 71.633 | 83.759 | 1.00 | 23.37 | O |
| ATOM | 4860 | CB  | GLN B 204 | -3.019  | 73.285 | 86.023 | 1.00 | 22.15 | C |
| ATOM | 4861 | CG  | GLN B 204 | -2.263  | 73.694 | 84.784 | 1.00 | 21.03 | C |
| ATOM | 4862 | CD  | GLN B 204 | -0.802  | 73.985 | 85.054 | 1.00 | 22.57 | C |
| ATOM | 4863 | OE1 | GLN B 204 | -0.462  | 74.717 | 85.981 | 1.00 | 22.97 | O |
| ATOM | 4864 | NE2 | GLN B 204 | 0.071   | 73.419 | 84.233 | 1.00 | 22.79 | N |
| ATOM | 4865 | N   | HIS B 205 | -4.571  | 70.537 | 85.717 | 1.00 | 21.84 | N |
| ATOM | 4866 | CA  | HIS B 205 | -4.666  | 69.257 | 85.043 | 1.00 | 21.93 | C |
| ATOM | 4867 | C   | HIS B 205 | -6.073  | 69.066 | 84.511 | 1.00 | 21.39 | C |
| ATOM | 4868 | O   | HIS B 205 | -6.271  | 68.399 | 83.496 | 1.00 | 23.59 | O |
| ATOM | 4869 | CB  | HIS B 205 | -4.308  | 68.082 | 85.954 | 1.00 | 20.04 | C |
| ATOM | 4870 | CG  | HIS B 205 | -3.986  | 66.835 | 85.192 | 1.00 | 20.66 | C |
| ATOM | 4871 | ND1 | HIS B 205 | -4.529  | 65.605 | 85.496 | 1.00 | 21.61 | N |
| ATOM | 4872 | CD2 | HIS B 205 | -3.221  | 66.646 | 84.090 | 1.00 | 19.66 | C |
| ATOM | 4873 | CE1 | HIS B 205 | -4.116  | 64.712 | 84.613 | 1.00 | 19.74 | C |
| ATOM | 4874 | NE2 | HIS B 205 | -3.322  | 65.319 | 83.748 | 1.00 | 21.55 | N |
| ATOM | 4875 | N   | ILE B 206 | -7.057  | 69.637 | 85.193 | 1.00 | 20.10 | N |
| ATOM | 4876 | CA  | ILE B 206 | -8.426  | 69.518 | 84.712 | 1.00 | 20.48 | C |
| ATOM | 4877 | C   | ILE B 206 | -8.517  | 70.267 | 83.377 | 1.00 | 19.60 | C |
| ATOM | 4878 | O   | ILE B 206 | -9.238  | 69.852 | 82.468 | 1.00 | 18.51 | O |
| ATOM | 4879 | CB  | ILE B 206 | -9.431  | 70.083 | 85.740 | 1.00 | 20.89 | C |
| ATOM | 4880 | CG1 | ILE B 206 | -9.493  | 69.140 | 86.945 | 1.00 | 19.71 | C |
| ATOM | 4881 | CG2 | ILE B 206 | -10.814 | 70.253 | 85.099 | 1.00 | 18.69 | C |
| ATOM | 4882 | CD1 | ILE B 206 | -10.414 | 69.607 | 88.046 | 1.00 | 23.12 | C |
| ATOM | 4883 | N   | ARG B 207 | -7.777  | 71.369 | 83.258 | 1.00 | 19.99 | N |
| ATOM | 4884 | CA  | ARG B 207 | -7.756  | 72.116 | 82.005 | 1.00 | 21.27 | C |
| ATOM | 4885 | C   | ARG B 207 | -7.140  | 71.216 | 80.935 | 1.00 | 21.03 | C |
| ATOM | 4886 | O   | ARG B 207 | -7.596  | 71.201 | 79.790 | 1.00 | 20.69 | O |
| ATOM | 4887 | CB  | ARG B 207 | -6.921  | 73.394 | 82.125 | 1.00 | 25.14 | C |
| ATOM | 4888 | CG  | ARG B 207 | -7.653  | 74.564 | 82.747 | 1.00 | 30.17 | C |
| ATOM | 4889 | CD  | ARG B 207 | -6.968  | 75.879 | 82.406 | 1.00 | 33.61 | C |
| ATOM | 4890 | NE  | ARG B 207 | -5.694  | 76.058 | 83.099 | 1.00 | 37.62 | N |
| ATOM | 4891 | CZ  | ARG B 207 | -5.581  | 76.348 | 84.392 | 1.00 | 38.20 | C |
| ATOM | 4892 | NH1 | ARG B 207 | -6.669  | 76.492 | 85.139 | 1.00 | 39.62 | N |
| ATOM | 4893 | NH2 | ARG B 207 | -4.381  | 76.511 | 84.934 | 1.00 | 39.09 | N |
| ATOM | 4894 | N   | THR B 208 | -6.100  | 70.475 | 81.317 | 1.00 | 17.46 | N |
| ATOM | 4895 | CA  | THR B 208 | -5.435  | 69.557 | 80.399 | 1.00 | 18.28 | C |
| ATOM | 4896 | C   | THR B 208 | -6.421  | 68.493 | 79.919 | 1.00 | 17.22 | C |
| ATOM | 4897 | O   | THR B 208 | -6.537  | 68.235 | 78.723 | 1.00 | 15.74 | O |
| ATOM | 4898 | CB  | THR B 208 | -4.225  | 68.849 | 81.074 | 1.00 | 17.85 | C |
| ATOM | 4899 | OG1 | THR B 208 | -3.169  | 69.795 | 81.272 | 1.00 | 19.08 | O |
| ATOM | 4900 | CG2 | THR B 208 | -3.711  | 67.700 | 80.205 | 1.00 | 16.54 | C |
| ATOM | 4901 | N   | LEU B 209 | -7.132  | 67.880 | 80.858 | 1.00 | 17.13 | N |
| ATOM | 4902 | CA  | LEU B 209 | -8.105  | 66.852 | 80.506 | 1.00 | 19.72 | C |
| ATOM | 4903 | C   | LEU B 209 | -9.210  | 67.445 | 79.626 | 1.00 | 20.21 | C |
| ATOM | 4904 | O   | LEU B 209 | -9.728  | 66.780 | 78.730 | 1.00 | 21.34 | O |
| ATOM | 4905 | CB  | LEU B 209 | -8.695  | 66.230 | 81.778 | 1.00 | 17.44 | C |
| ATOM | 4906 | CG  | LEU B 209 | -7.653  | 65.546 | 82.683 | 1.00 | 17.52 | C |
| ATOM | 4907 | CD1 | LEU B 209 | -8.318  | 65.051 | 83.947 | 1.00 | 16.66 | C |
| ATOM | 4908 | CD2 | LEU B 209 | -6.991  | 64.384 | 81.942 | 1.00 | 15.67 | C |
| ATOM | 4909 | N   | THR B 210 | -9.546  | 68.707 | 79.873 | 1.00 | 20.48 | N |
| ATOM | 4910 | CA  | THR B 210 | -10.581 | 69.391 | 79.108 | 1.00 | 19.84 | C |
| ATOM | 4911 | C   | THR B 210 | -10.110 | 69.661 | 77.683 | 1.00 | 19.06 | C |
| ATOM | 4912 | O   | THR B 210 | -10.845 | 69.450 | 76.716 | 1.00 | 19.74 | O |
| ATOM | 4913 | CB  | THR B 210 | -10.976 | 70.715 | 79.804 | 1.00 | 20.82 | C |
| ATOM | 4914 | OG1 | THR B 210 | -11.690 | 70.419 | 81.013 | 1.00 | 18.19 | O |
| ATOM | 4915 | CG2 | THR B 210 | -11.839 | 71.561 | 78.905 | 1.00 | 21.70 | C |
| ATOM | 4916 | N   | SER B 211 | -8.870  | 70.112 | 77.558 | 1.00 | 19.91 | N |
| ATOM | 4917 | CA  | SER B 211 | -8.287  | 70.395 | 76.254 | 1.00 | 18.55 | C |
| ATOM | 4918 | C   | SER B 211 | -8.139  | 69.102 | 75.450 | 1.00 | 18.87 | C |
| ATOM | 4919 | O   | SER B 211 | -8.305  | 69.091 | 74.228 | 1.00 | 19.28 | O |

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ATOM   4920  CB  SER B 211      -6.921  71.058  76.431  1.00 18.07           C
ATOM   4921  OG  SER B 211      -6.345  71.376  75.177  1.00 22.22           O
ATOM   4922  N   ALA B 212      -7.835  68.008  76.139  1.00 17.82           N
ATOM   4923  CA  ALA B 212      -7.667  66.729  75.471  1.00 17.53           C
ATOM   4924  C   ALA B 212      -9.000  66.256  74.906  1.00 19.60           C
ATOM   4925  O   ALA B 212      -9.052  65.664  73.818  1.00 19.19           O
ATOM   4926  CB  ALA B 212      -7.108  65.700  76.445  1.00 16.89           C
ATOM   4927  N   ARG B 213     -10.077  66.507  75.649  1.00 18.12           N
ATOM   4928  CA  ARG B 213     -11.409  66.115  75.204  1.00 17.72           C
ATOM   4929  C   ARG B 213     -11.872  67.019  74.065  1.00 18.18           C
ATOM   4930  O   ARG B 213     -12.529  66.561  73.130  1.00 18.13           O
ATOM   4931  CB  ARG B 213     -12.421  66.210  76.351  1.00 19.84           C
ATOM   4932  CG  ARG B 213     -13.834  65.792  75.951  1.00 19.42           C
ATOM   4933  CD  ARG B 213     -13.936  64.280  75.871  1.00 19.27           C
ATOM   4934  NE  ARG B 213     -13.918  63.726  77.220  1.00 22.67           N
ATOM   4935  CZ  ARG B 213     -13.762  62.441  77.514  1.00 23.20           C
ATOM   4936  NH1 ARG B 213     -13.598  61.538  76.547  1.00 19.11           N
ATOM   4937  NH2 ARG B 213     -13.781  62.063  78.787  1.00 25.18           N
ATOM   4938  N   LEU B 214     -11.532  68.305  74.148  1.00 18.41           N
ATOM   4939  CA  LEU B 214     -11.927  69.257  73.111  1.00 18.16           C
ATOM   4940  C   LEU B 214     -11.312  68.891  71.760  1.00 20.12           C
ATOM   4941  O   LEU B 214     -11.995  68.905  70.740  1.00 21.01           O
ATOM   4942  CB  LEU B 214     -11.516  70.682  73.498  1.00 13.53           C
ATOM   4943  CG  LEU B 214     -11.911  71.767  72.491  1.00 15.24           C
ATOM   4944  CD1 LEU B 214     -13.432  71.831  72.366  1.00 12.97           C
ATOM   4945  CD2 LEU B 214     -11.364  73.119  72.940  1.00 15.55           C
ATOM   4946  N   ALA B 215     -10.020  68.565  71.749  1.00 20.59           N
ATOM   4947  CA  ALA B 215      -9.361  68.196  70.503  1.00 19.77           C
ATOM   4948  C   ALA B 215     -10.072  66.984  69.921  1.00 18.60           C
ATOM   4949  O   ALA B 215     -10.307  66.910  68.722  1.00 18.21           O
ATOM   4950  CB  ALA B 215      -7.883  67.876  70.748  1.00 18.26           C
ATOM   4951  N   ALA B 216     -10.425  66.038  70.784  1.00 19.98           N
ATOM   4952  CA  ALA B 216     -11.118  64.828  70.351  1.00 19.88           C
ATOM   4953  C   ALA B 216     -12.490  65.167  69.767  1.00 20.59           C
ATOM   4954  O   ALA B 216     -12.888  64.616  68.737  1.00 21.79           O
ATOM   4955  CB  ALA B 216     -11.266  63.860  71.524  1.00 19.84           C
ATOM   4956  N   ASP B 217     -13.210  66.074  70.423  1.00 19.61           N
ATOM   4957  CA  ASP B 217     -14.525  66.482  69.943  1.00 19.21           C
ATOM   4958  C   ASP B 217     -14.434  67.203  68.610  1.00 19.44           C
ATOM   4959  O   ASP B 217     -15.229  66.945  67.703  1.00 19.85           O
ATOM   4960  CB  ASP B 217     -15.219  67.392  70.959  1.00 19.27           C
ATOM   4961  CG  ASP B 217     -15.769  66.626  72.137  1.00 19.25           C
ATOM   4962  OD1 ASP B 217     -15.932  65.393  72.024  1.00 21.61           O
ATOM   4963  OD2 ASP B 217     -16.053  67.252  73.172  1.00 22.10           O
ATOM   4964  N   VAL B 218     -13.474  68.116  68.494  1.00 19.14           N
ATOM   4965  CA  VAL B 218     -13.291  68.867  67.257  1.00 18.75           C
ATOM   4966  C   VAL B 218     -12.879  67.923  66.122  1.00 20.80           C
ATOM   4967  O   VAL B 218     -13.199  68.157  64.952  1.00 22.10           O
ATOM   4968  CB  VAL B 218     -12.232  69.965  67.436  1.00 18.18           C
ATOM   4969  CG1 VAL B 218     -11.983  70.687  66.107  1.00 16.91           C
ATOM   4970  CG2 VAL B 218     -12.703  70.948  68.502  1.00 17.06           C
ATOM   4971  N   ALA B 219     -12.180  66.850  66.475  1.00 20.22           N
ATOM   4972  CA  ALA B 219     -11.752  65.865  65.486  1.00 20.60           C
ATOM   4973  C   ALA B 219     -12.868  64.832  65.269  1.00 20.20           C
ATOM   4974  O   ALA B 219     -12.709  63.878  64.511  1.00 22.14           O
ATOM   4975  CB  ALA B 219     -10.458  65.178  65.945  1.00 16.39           C
ATOM   4976  N   ASP B 220     -13.991  65.027  65.956  1.00 20.64           N
ATOM   4977  CA  ASP B 220     -15.165  64.156  65.830  1.00 20.77           C
ATOM   4978  C   ASP B 220     -14.959  62.658  66.116  1.00 21.41           C
ATOM   4979  O   ASP B 220     -15.517  61.806  65.415  1.00 20.46           O
ATOM   4980  CB  ASP B 220     -15.783  64.348  64.429  1.00 21.86           C
ATOM   4981  CG  ASP B 220     -17.166  63.714  64.292  1.00 22.50           C
ATOM   4982  OD1 ASP B 220     -17.974  63.804  65.237  1.00 23.62           O
ATOM   4983  OD2 ASP B 220     -17.453  63.138  63.221  1.00 26.90           O
ATOM   4984  N   VAL B 221     -14.167  62.335  67.140  1.00 20.34           N
ATOM   4985  CA  VAL B 221     -13.932  60.939  67.518  1.00 18.59           C
ATOM   4986  C   VAL B 221     -14.055  60.776  69.036  1.00 18.48           C
ATOM   4987  O   VAL B 221     -13.709  61.679  69.795  1.00 17.55           O
ATOM   4988  CB  VAL B 221     -12.539  60.439  67.062  1.00 18.85           C
ATOM   4989  CG1 VAL B 221     -12.481  60.393  65.547  1.00 19.39           C
ATOM   4990  CG2 VAL B 221     -11.446  61.348  67.608  1.00 20.43           C
ATOM   4991  N   PRO B 222     -14.551  59.614  69.496  1.00 18.44           N
ATOM   4992  CA  PRO B 222     -14.724  59.338  70.928  1.00 18.51           C
ATOM   4993  C   PRO B 222     -13.461  58.838  71.651  1.00 18.56           C
ATOM   4994  O   PRO B 222     -13.524  57.897  72.449  1.00 18.16           O
ATOM   4995  CB  PRO B 222     -15.844  58.306  70.931  1.00 16.46           C
ATOM   4996  CG  PRO B 222     -15.517  57.491  69.724  1.00 19.35           C
ATOM   4997  CD  PRO B 222     -15.104  58.518  68.680  1.00 16.09           C
ATOM   4998  N   THR B 223     -12.328  59.484  71.387  1.00 16.72           N
ATOM   4999  CA  THR B 223     -11.062  59.085  71.994  1.00 18.06           C
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ATOM   5000  C   THR B 223    -11.153  58.860  73.502  1.00 19.46        C
ATOM   5001  O   THR B 223    -11.706  59.679  74.236  1.00 20.60        O
ATOM   5002  CB  THR B 223     -9.964  60.125  71.730  1.00 18.12        C
ATOM   5003  OG1 THR B 223     -9.885  60.388  70.324  1.00 19.12        O
ATOM   5004  CG2 THR B 223     -8.616  59.598  72.203  1.00 18.69        C
ATOM   5005  N   VAL B 224    -10.613  57.738  73.962  1.00 17.54        N
ATOM   5006  CA  VAL B 224    -10.627  57.431  75.385  1.00 18.27        C
ATOM   5007  C   VAL B 224     -9.563  58.291  76.076  1.00 19.91        C
ATOM   5008  O   VAL B 224     -8.378  58.227  75.735  1.00 19.58        O
ATOM   5009  CB  VAL B 224    -10.342  55.926  '75.632  1.00 17.58        C
ATOM   5010  CG1 VAL B 224    -10.168  55.658  77.114  1.00 16.61        C
ATOM   5011  CG2 VAL B 224    -11.494  55.092  75.089  1.00 14.58       ·C
ATOM   5012  N   VAL B 225    -10.001  59.100  77.036  1.00 19.45        N
ATOM   5013  CA  VAL B 225     -9.119  59.991  77.775  1.00 19.37        C
ATOM   5014  C   VAL B 225     -8.808  59.422  79.152  1.00 20.29        C
ATOM   5015  O   VAL B 225     -9.705  59.109  79.929  1.00 21.24        O
ATOM   5016  CB  VAL B 225     -9.756  61.381  77.939  1.00 19.44        C
ATOM   5017  CG1 VAL B 225     -8.866  62.275  78.808  1.00 17.79        C
ATOM   5018  CG2 VAL B 225     -9.981  62.003  76.567  1.00 18.42        C
ATOM   5019  N   ILE B 226     -7.520  59.293  79.439  1.00 20.64        N
ATOM   5020  CA  ILE B 226     -7.060  58.754  80.703  1.00 18.37        C
ATOM   5021  C   ILE B 226     -6.315  59.807  81.508  1.00 19.66        C
ATOM   5022  O   ILE B 226     -5.429  60.492  80.989  1.00 19.99        O
ATOM   5023  CB  ILE B 226     -6.115  57.581  80.463  1.00 18.84        C
ATOM   5024  CG1 ILE B 226     -6.836  56.493  79.667  1.00 19.98        C
ATOM   5025  CG2 ILE B 226     -5.594  57.057  81.784  1.00 17.21        C
ATOM   5026  CD1 ILE B 226     -5.944  55.318  79.310  1.00 20.85        C
ATOM   5027  N   ALA B 227     -6.679  59.944  82.777  1.00 19.40        N
ATOM   5028  CA  ALA B 227     -6.010  60.898  83.647  1.00 18.60        C
ATOM   5029  C   ALA B 227     -5.093  60.122  84.578  1.00 19.30        C
ATOM   5030  O   ALA B 227     -5.505  59.121  85.183  1.00 17.83        O
ATOM   5031  CB  ALA B 227     -7.029  61.693  84.457  1.00 20.38        C
ATOM   5032  N   ARG B 228     -3.847  60.578  84.677  1.00 18.86        N
ATOM   5033  CA  ARG B 228     -2.853  59.954  85.540  1.00 17.68        C
ATOM   5034  C   ARG B 228     -2.374  60.952  86.585  1.00 19.47        C
ATOM   5035  O   ARG B 228     -2.175  62.126  86.279  1.00 18.78        O
ATOM   5036  CB  ARG B 228     -1.658  59.475  84.710  1.00 17.68        C
ATOM   5037  CG  ARG B 228     -0.348  59.356  85.490  1.00 17.49        C
ATOM   5038  CD  ARG B 228      0.822  58.918  84.602  1.00 15.89        C
ATOM   5039  NE  ARG B 228      2.100  59.249  85.226  1.00 19.12        N
ATOM   5040  CZ  ARG B 228      3.288  58.815  84.813  1.00 20.02        C
ATOM   5041  NH1 ARG B 228      3.393  58.011  83.760  1.00 22.13        N
ATOM   5042  NH2 ARG B 228      4.380  59.194  85.454  1.00 19.18        N
ATOM   5043  N   THR B 229     -2.201  60.494  87.823  1.00 19.62        N
ATOM   5044  CA  THR B 229     -1.706  61.378  88.866  1.00 19.91        C
ATOM   5045  C   THR B 229     -0.397  60.829  89.415  1.00 20.62        C
ATOM   5046  O   THR B 229     -0.259  59.626  89.628  1.00 20.34        O
ATOM   5047  CB  THR B 229     -2.714  61.548  90.030  1.00 20.02        C
ATOM   5048  OG1 THR B 229     -2.158  62.446  91.001  1.00 21.15        O
ATOM   5049  CG2 THR B 229     -3.016  60.207  90.699  1.00 19.53        C
ATOM   5050  N   ASP B 230      0.565  61.719  89.633  1.00 20.49        N
ATOM   5051  CA  ASP B 230      1.873  61.332  90.151  1.00 21.07        C
ATOM   5052  C   ASP B 230      2.073  61.775  91.597  1.00 21.30        C
ATOM   5053  O   ASP B 230      3.200  61.786  92.103  1.00 22.63        O
ATOM   5054  CB  ASP B 230      2.970  61.937  89.272  1.00 19.22        C
ATOM   5055  CG  ASP B 230      3.198  61.148  88.007  1.00 21.83        C
ATOM   5056  OD1 ASP B 230      3.920  60.130  88.069  1.00 22.70        O
ATOM   5057  OD2 ASP B 230      2.652  61.533  86.951  1.00 19.14        O
ATOM   5058  N   ALA B 231      0.980  62.117  92.267  1.00 22.31        N
ATOM   5059  CA  ALA B 231      1.042  62.594  93.647  1.00 23.19        C
ATOM   5060  C   ALA B 231      1.512  61.575  94.687  1.00 23.83        C
ATOM   5061  O   ALA B 231      1.860  61.947  95.803  1.00 22.33        O
ATOM   5062  CB  ALA B 231     -0.322  63.151  94.056  1.00 24.95        C
ATOM   5063  N   GLU B 232      1.521  60.297  94.331  1.00 23.71        N
ATOM   5064  CA  GLU B 232      1.937  59.266  95.273  1.00 25.77        C
ATOM   5065  C   GLU B 232      3.366  59.484  95.771  1.00 25.90        C
ATOM   5066  O   GLU B 232      3.647  59.312  96.962  1.00 26.62        O
ATOM   5067  CB  GLU B 232      1.807  57.885  94.624  1.00 27.51        C
ATOM   5068  CG  GLU B 232      1.721  56.719  95.595  1.00 33.51        C
ATOM   5069  CD  GLU B 232      3.076  56.158  95.973  1.00 37.71        C
ATOM   5070  OE1 GLU B 232      3.837  55.767  95.062  1.00 41.27        O
ATOM   5071  OE2 GLU B 232      3.381  56.100  97.181  1.00 41.02        O
ATOM   5072  N   ALA B 233      4.265  59.882  94.872  1.00 24.09        N
ATOM   5073  CA  ALA B 233      5.661  60.104  95.249  1.00 23.56        C
ATOM   5074  C   ALA B 233      6.131  61.561  95.149  1.00 24.50        C
ATOM   5075  O   ALA B 233      7.122  61.940  95.777  1.00 26.15        O
ATOM   5076  CB  ALA B 233      6.572  59.207  94.405  1.00 22.01        C
ATOM   5077  N   ALA B 234      5.430  62.377  94.369  1.00 23.14        N
ATOM   5078  CA  ALA B 234      5.814  63.776  94.208  1.00 22.79        C
ATOM   5079  C   ALA B 234      5.697  64.559  95.515  1.00 24.37        C
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| ATOM | 5080 | O   | ALA | B | 234 | 4.654   | 64.551 | 96.167 | 1.00 | 23.83 | O |
| ATOM | 5081 | CB  | ALA | B | 234 | 4.962   | 64.427 | 93.135 | 1.00 | 21.36 | C |
| ATOM | 5082 | N   | THR | B | 235 | 6.777   | 65.240 | 95.885 | 1.00 | 24.30 | N |
| ATOM | 5083 | CA  | THR | B | 235 | 6.815   | 66.035 | 97.106 | 1.00 | 25.87 | C |
| ATOM | 5084 | C   | THR | B | 235 | 6.885   | 67.521 | 96.776 | 1.00 | 25.03 | C |
| ATOM | 5085 | O   | THR | B | 235 | 7.102   | 68.349 | 97.657 | 1.00 | 26.81 | O |
| ATOM | 5086 | CB  | THR | B | 235 | 8.038   | 65.681 | 97.964 | 1.00 | 26.38 | C |
| ATOM | 5087 | OG1 | THR | B | 235 | 9.229   | 65.996 | 97.233 | 1.00 | 27.61 | O |
| ATOM | 5088 | CG2 | THR | B | 235 | 8.040   | 64.194 | 98.309 | 1.00 | 26.47 | C |
| ATOM | 5089 | N   | LEU | B | 236 | 6.707   | 67.851 | 95.502 | 1.00 | 24.04 | N |
| ATOM | 5090 | CA  | LEU | B | 236 | 6.736   | 69.239 | 95.057 | 1.00 | 22.85 | C |
| ATOM | 5091 | C   | LEU | B | 236 | 5.529   | 69.547 | 94.168 | 1.00 | 22.47 | C |
| ATOM | 5092 | O   | LEU | B | 236 | 4.991   | 68.670 | 93.484 | 1.00 | 20.90 | O |
| ATOM | 5093 | CB  | LEU | B | 236 | 8.031   | 69.530 | 94.279 | 1.00 | 21.59 | C |
| ATOM | 5094 | CG  | LEU | B | 236 | 9.375   | 69.471 | 95.026 | 1.00 | 23.71 | C |
| ATOM | 5095 | CD1 | LEU | B | 236 | 10.518  | 69.402 | 94.028 | 1.00 | 21.79 | C |
| ATOM | 5096 | CD2 | LEU | B | 236 | 9.532   | 70.696 | 95.928 | 1.00 | 21.30 | C |
| ATOM | 5097 | N   | ILE | B | 237 | 5.107   | 70.803 | 94.195 | 1.00 | 21.43 | N |
| ATOM | 5098 | CA  | ILE | B | 237 | 3.990   | 71.266 | 93.390 | 1.00 | 21.22 | C |
| ATOM | 5099 | C   | ILE | B | 237 | 4.344   | 72.701 | 93.007 | 1.00 | 21.54 | C |
| ATOM | 5100 | O   | ILE | B | 237 | 4.980   | 73.417 | 93.788 | 1.00 | 21.30 | O |
| ATOM | 5101 | CB  | ILE | B | 237 | 2.666   | 71.204 | 94.192 | 1.00 | 20.96 | C |
| ATOM | 5102 | CG1 | ILE | B | 237 | 1.490   | 71.573 | 93.286 | 1.00 | 20.78 | C |
| ATOM | 5103 | CG2 | ILE | B | 237 | 2.743   | 72.122 | 95.404 | 1.00 | 20.45 | C |
| ATOM | 5104 | CD1 | ILE | B | 237 | 0.138   | 71.378 | 93.939 | 1.00 | 19.19 | C |
| ATOM | 5105 | N   | THR | B | 238 | 3.945   | 73.120 | 91.808 | 1.00 | 21.63 | N |
| ATOM | 5106 | CA  | THR | B | 238 | 4.276   | 74.457 | 91.319 | 1.00 | 22.03 | C |
| ATOM | 5107 | C   | THR | B | 238 | 3.580   | 75.619 | 92.005 | 1.00 | 21.77 | C |
| ATOM | 5108 | O   | THR | B | 238 | 4.121   | 76.719 | 92.047 | 1.00 | 22.77 | O |
| ATOM | 5109 | CB  | THR | B | 238 | 3.994   | 74.597 | 89.807 | 1.00 | 23.66 | C |
| ATOM | 5110 | OG1 | THR | B | 238 | 2.593   | 74.410 | 89.566 | 1.00 | 24.44 | O |
| ATOM | 5111 | CG2 | THR | B | 238 | 4.797   | 73.572 | 89.008 | 1.00 | 22.31 | C |
| ATOM | 5112 | N   | SER | B | 239 | 2.387   | 75.386 | 92.537 | 1.00 | 21.99 | N |
| ATOM | 5113 | CA  | SER | B | 239 | 1.642   | 76.462 | 93.177 | 1.00 | 23.56 | C |
| ATOM | 5114 | C   | SER | B | 239 | 0.662   | 75.960 | 94.237 | 1.00 | 25.34 | C |
| ATOM | 5115 | O   | SER | B | 239 | 0.278   | 74.787 | 94.245 | 1.00 | 24.62 | O |
| ATOM | 5116 | CB  | SER | B | 239 | 0.891   | 77.260 | 92.101 | 1.00 | 21.76 | C |
| ATOM | 5117 | OG  | SER | B | 239 | 0.101   | 78.294 | 92.666 | 1.00 | 25.17 | O |
| ATOM | 5118 | N   | ASP | B | 240 | 0.267   | 76.859 | 95.135 | 1.00 | 26.35 | N |
| ATOM | 5119 | CA  | ASP | B | 240 | -0.675  | 76.527 | 96.200 | 1.00 | 27.81 | C |
| ATOM | 5120 | C   | ASP | B | 240 | -2.006  | 77.222 | 95.930 | 1.00 | 28.97 | C |
| ATOM | 5121 | O   | ASP | B | 240 | -2.866  | 77.316 | 96.806 | 1.00 | 30.03 | O |
| ATOM | 5122 | CB  | ASP | B | 240 | -0.109  | 76.965 | 97.559 | 1.00 | 27.75 | C |
| ATOM | 5123 | CG  | ASP | B | 240 | 0.099   | 78.473 | 97.658 | 1.00 | 28.97 | C |
| ATOM | 5124 | OD1 | ASP | B | 240 | 0.268   | 79.142 | 96.618 | 1.00 | 32.07 | O |
| ATOM | 5125 | OD2 | ASP | B | 240 | 0.115   | 78.995 | 98.787 | 1.00 | 31.40 | O |
| ATOM | 5126 | N   | VAL | B | 241 | -2.173  | 77.689 | 94.698 | 1.00 | 29.19 | N |
| ATOM | 5127 | CA  | VAL | B | 241 | -3.377  | 78.399 | 94.299 | 1.00 | 29.01 | C |
| ATOM | 5128 | C   | VAL | B | 241 | -4.670  | 77.593 | 94.427 | 1.00 | 29.93 | C |
| ATOM | 5129 | O   | VAL | B | 241 | -5.705  | 78.142 | 94.810 | 1.00 | 30.46 | O |
| ATOM | 5130 | CB  | VAL | B | 241 | -3.244  | 78.929 | 92.843 | 1.00 | 29.48 | C |
| ATOM | 5131 | CG1 | VAL | B | 241 | -3.073  | 77.773 | 91.871 | 1.00 | 29.34 | C |
| ATOM | 5132 | CG2 | VAL | B | 241 | -4.463  | 79.755 | 92.473 | 1.00 | 29.98 | C |
| ATOM | 5133 | N   | ASP | B | 242 | -4.619  | 76.299 | 94.125 | 1.00 | 29.61 | N |
| ATOM | 5134 | CA  | ASP | B | 242 | -5.815  | 75.465 | 94.194 | 1.00 | 29.58 | C |
| ATOM | 5135 | C   | ASP | B | 242 | -6.114  | 74.961 | 95.609 | 1.00 | 30.89 | C |
| ATOM | 5136 | O   | ASP | B | 242 | -5.332  | 74.213 | 96.196 | 1.00 | 30.81 | O |
| ATOM | 5137 | CB  | ASP | B | 242 | -5.688  | 74.273 | 93.237 | 1.00 | 28.10 | C |
| ATOM | 5138 | CG  | ASP | B | 242 | -7.026  | 73.602 | 92.961 | 1.00 | 27.31 | C |
| ATOM | 5139 | OD1 | ASP | B | 242 | -7.748  | 73.294 | 93.931 | 1.00 | 28.76 | O |
| ATOM | 5140 | OD2 | ASP | B | 242 | -7.357  | 73.374 | 91.778 | 1.00 | 26.78 | O |
| ATOM | 5141 | N   | GLU | B | 243 | -7.267  | 75.365 | 96.134 | 1.00 | 31.39 | N |
| ATOM | 5142 | CA  | GLU | B | 243 | -7.692  | 74.989 | 97.476 | 1.00 | 32.96 | C |
| ATOM | 5143 | C   | GLU | B | 243 | -7.715  | 73.489 | 97.726 | 1.00 | 31.86 | C |
| ATOM | 5144 | O   | GLU | B | 243 | -7.527  | 73.041 | 98.853 | 1.00 | 31.81 | O |
| ATOM | 5145 | CB  | GLU | B | 243 | -9.069  | 75.587 | 97.773 | 1.00 | 36.15 | C |
| ATOM | 5146 | CG  | GLU | B | 243 | -9.049  | 77.099 | 97.914 | 1.00 | 41.70 | C |
| ATOM | 5147 | CD  | GLU | B | 243 | -10.424 | 77.686 | 98.149 | 1.00 | 45.15 | C |
| ATOM | 5148 | OE1 | GLU | B | 243 | -11.058 | 77.338 | 99.167 | 1.00 | 47.04 | O |
| ATOM | 5149 | OE2 | GLU | B | 243 | -10.872 | 78.496 | 97.311 | 1.00 | 48.92 | O |
| ATOM | 5150 | N   | ARG | B | 244 | -7.944  | 72.709 | 96.680 | 1.00 | 31.44 | N |
| ATOM | 5151 | CA  | ARG | B | 244 | -7.972  | 71.265 | 96.836 | 1.00 | 28.10 | C |
| ATOM | 5152 | C   | ARG | B | 244 | -6.581  | 70.698 | 97.104 | 1.00 | 27.33 | C |
| ATOM | 5153 | O   | ARG | B | 244 | -6.458  | 69.564 | 97.571 | 1.00 | 26.75 | O |
| ATOM | 5154 | CB  | ARG | B | 244 | -8.563  | 70.619 | 95.587 | 1.00 | 29.77 | C |
| ATOM | 5155 | CG  | ARG | B | 244 | -10.062 | 70.802 | 95.457 | 1.00 | 29.12 | C |
| ATOM | 5156 | CD  | ARG | B | 244 | -10.527 | 70.491 | 94.044 | 1.00 | 27.26 | C |
| ATOM | 5157 | NE  | ARG | B | 244 | -9.920  | 71.414 | 93.093 | 1.00 | 27.46 | N |
| ATOM | 5158 | CZ  | ARG | B | 244 | -10.334 | 71.578 | 91.843 | 1.00 | 26.69 | C |
| ATOM | 5159 | NH1 | ARG | B | 244 | -11.365 | 70.877 | 91.391 | 1.00 | 25.55 | N |

| ATOM | 5160 | NH2 | ARG B 244 | -9.720 | 72.448 | 91.050 | 1.00 | 25.32 | N |
|------|------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 5161 | N   | ASP B 245 | -5.542 | 71.486 | 96.817 | 1.00 | 25.32 | N |
| ATOM | 5162 | CA  | ASP B 245 | -4.159 | 71.048 | 97.027 | 1.00 | 25.42 | C |
| ATOM | 5163 | C   | ASP B 245 | -3.568 | 71.578 | 98.324 | 1.00 | 25.31 | C |
| ATOM | 5164 | O   | ASP B 245 | -2.668 | 70.971 | 98.907 | 1.00 | 26.58 | O |
| ATOM | 5165 | CB  | ASP B 245 | -3.261 | 71.500 | 95.871 | 1.00 | 24.82 | C |
| ATOM | 5166 | CG  | ASP B 245 | -3.745 | 71.003 | 94.532 | 1.00 | 25.94 | C |
| ATOM | 5167 | OD1 | ASP B 245 | -4.164 | 69.824 | 94.466 | 1.00 | 23.27 | O |
| ATOM | 5168 | OD2 | ASP B 245 | -3.696 | 71.788 | 93.552 | 1.00 | 25.04 | O |
| ATOM | 5169 | N   | GLN B 246 | -4.077 | 72.717 | 98.769 | 1.00 | 26.09 | N |
| ATOM | 5170 | CA  | GLN B 246 | -3.597 | 73.348 | 99.988 | 1.00 | 26.95 | C |
| ATOM | 5171 | C   | GLN B 246 | -3.486 | 72.443 | 101.211 | 1.00 | 26.44 | C |
| ATOM | 5172 | O   | GLN B 246 | -2.524 | 72.545 | 101.967 | 1.00 | 27.38 | O |
| ATOM | 5173 | CB  | GLN B 246 | -4.463 | 74.565 | 100.299 | 1.00 | 27.50 | C |
| ATOM | 5174 | CG  | GLN B 246 | -4.105 | 75.757 | 99.425 | 1.00 | 28.46 | C |
| ATOM | 5175 | CD  | GLN B 246 | -5.171 | 76.824 | 99.422 | 1.00 | 32.35 | C |
| ATOM | 5176 | OE1 | GLN B 246 | -6.013 | 76.883 | 100.322 | 1.00 | 33.14 | O |
| ATOM | 5177 | NE2 | GLN B 246 | -5.138 | 77.688 | 98.409 | 1.00 | 31.35 | N |
| ATOM | 5178 | N   | PRO B 247 | -4.458 | 71.540 | 101.420 | 1.00 | 26.46 | N |
| ATOM | 5179 | CA  | PRO B 247 | -4.384 | 70.656 | 102.584 | 1.00 | 26.43 | C |
| ATOM | 5180 | C   | PRO B 247 | -3.073 | 69.895 | 102.687 | 1.00 | 27.36 | C |
| ATOM | 5181 | O   | PRO B 247 | -2.678 | 69.479 | 103.773 | 1.00 | 29.21 | O |
| ATOM | 5182 | CB  | PRO B 247 | -5.564 | 69.710 | 102.376 | 1.00 | 26.84 | C |
| ATOM | 5183 | CG  | PRO B 247 | -6.561 | 70.574 | 101.685 | 1.00 | 26.90 | C |
| ATOM | 5184 | CD  | PRO B 247 | -5.702 | 71.300 | 100.666 | 1.00 | 26.02 | C |
| ATOM | 5185 | N   | PHE B 248 | -2.391 | 69.728 | 101.560 | 1.00 | 27.21 | N |
| ATOM | 5186 | CA  | PHE B 248 | -1.144 | 68.973 | 101.536 | 1.00 | 27.84 | C |
| ATOM | 5187 | C   | PHE B 248 | 0.128 | 69.822 | 101.515 | 1.00 | 28.07 | C |
| ATOM | 5188 | O   | PHE B 248 | 1.220 | 69.311 | 101.766 | 1.00 | 27.67 | O |
| ATOM | 5189 | CB  | PHE B 248 | -1.167 | 68.031 | 100.329 | 1.00 | 26.94 | C |
| ATOM | 5190 | CG  | PHE B 248 | -2.387 | 67.161 | 100.273 | 1.00 | 25.83 | C |
| ATOM | 5191 | CD1 | PHE B 248 | -2.501 | 66.043 | 101.096 | 1.00 | 27.61 | C |
| ATOM | 5192 | CD2 | PHE B 248 | -3.437 | 67.469 | 99.411 | 1.00 | 26.03 | C |
| ATOM | 5193 | CE1 | PHE B 248 | -3.648 | 65.241 | 101.060 | 1.00 | 25.44 | C |
| ATOM | 5194 | CE2 | PHE B 248 | -4.588 | 66.678 | 99.366 | 1.00 | 24.16 | C |
| ATOM | 5195 | CZ  | PHE B 248 | -4.694 | 65.561 | 100.191 | 1.00 | 25.28 | C |
| ATOM | 5196 | N   | ILE B 249 | -0.020 | 71.112 | 101.226 | 1.00 | 29.80 | N |
| ATOM | 5197 | CA  | ILE B 249 | 1.111 | 72.034 | 101.154 | 1.00 | 31.23 | C |
| ATOM | 5198 | C   | ILE B 249 | 1.733 | 72.282 | 102.525 | 1.00 | 31.78 | C |
| ATOM | 5199 | O   | ILE B 249 | 1.053 | 72.720 | 103.450 | 1.00 | 31.75 | O |
| ATOM | 5200 | CB  | ILE B 249 | 0.677 | 73.394 | 100.560 | 1.00 | 31.69 | C |
| ATOM | 5201 | CG1 | ILE B 249 | -0.037 | 73.186 | 99.222 | 1.00 | 33.28 | C |
| ATOM | 5202 | CG2 | ILE B 249 | 1.888 | 74.283 | 100.355 | 1.00 | 33.03 | C |
| ATOM | 5203 | CD1 | ILE B 249 | 0.815 | 72.562 | 98.159 | 1.00 | 34.23 | C |
| ATOM | 5204 | N   | THR B 250 | 3.032 | 72.019 | 102.647 | 1.00 | 32.74 | N |
| ATOM | 5205 | CA  | THR B 250 | 3.733 | 72.208 | 103.915 | 1.00 | 34.59 | C |
| ATOM | 5206 | C   | THR B 250 | 4.099 | 73.667 | 104.164 | 1.00 | 35.10 | C |
| ATOM | 5207 | O   | THR B 250 | 4.262 | 74.089 | 105.311 | 1.00 | 34.15 | O |
| ATOM | 5208 | CB  | THR B 250 | 5.038 | 71.392 | 103.971 | 1.00 | 35.40 | C |
| ATOM | 5209 | OG1 | THR B 250 | 6.056 | 72.066 | 103.215 | 1.00 | 36.46 | O |
| ATOM | 5210 | CG2 | THR B 250 | 4.817 | 69.995 | 103.406 | 1.00 | 33.82 | C |
| ATOM | 5211 | N   | GLY B 251 | 4.243 | 74.431 | 103.086 | 1.00 | 35.87 | N |
| ATOM | 5212 | CA  | GLY B 251 | 4.593 | 75.833 | 103.226 | 1.00 | 36.74 | C |
| ATOM | 5213 | C   | GLY B 251 | 6.031 | 76.132 | 102.848 | 1.00 | 36.60 | C |
| ATOM | 5214 | O   | GLY B 251 | 6.365 | 77.261 | 102.508 | 1.00 | 37.13 | O |
| ATOM | 5215 | N   | GLU B 252 | 6.889 | 75.122 | 102.903 | 1.00 | 37.31 | N |
| ATOM | 5216 | CA  | GLU B 252 | 8.293 | 75.308 | 102.557 | 1.00 | 36.09 | C |
| ATOM | 5217 | C   | GLU B 252 | 8.421 | 75.496 | 101.052 | 1.00 | 35.71 | C |
| ATOM | 5218 | O   | GLU B 252 | 7.630 | 74.947 | 100.279 | 1.00 | 33.31 | O |
| ATOM | 5219 | CB  | GLU B 252 | 9.092 | 74.092 | 102.994 | 1.00 | 37.79 | C |
| ATOM | 5220 | CG  | GLU B 252 | 8.784 | 73.660 | 104.408 | 1.00 | 41.51 | C |
| ATOM | 5221 | CD  | GLU B 252 | 9.162 | 72.222 | 104.653 | 1.00 | 44.03 | C |
| ATOM | 5222 | OE1 | GLU B 252 | 10.372 | 71.912 | 104.609 | 1.00 | 46.64 | O |
| ATOM | 5223 | OE2 | GLU B 252 | 8.247 | 71.403 | 104.879 | 1.00 | 44.86 | O |
| ATOM | 5224 | N   | ARG B 253 | 9.428 | 76.262 | 100.644 | 1.00 | 35.63 | N |
| ATOM | 5225 | CA  | ARG B 253 | 9.665 | 76.549 | 99.233 | 1.00 | 35.95 | C |
| ATOM | 5226 | C   | ARG B 253 | 11.099 | 76.262 | 98.811 | 1.00 | 35.90 | C |
| ATOM | 5227 | O   | ARG B 253 | 12.023 | 76.355 | 99.620 | 1.00 | 35.41 | O |
| ATOM | 5228 | CB  | ARG B 253 | 9.337 | 78.013 | 98.953 | 1.00 | 38.43 | C |
| ATOM | 5229 | CG  | ARG B 253 | 7.889 | 78.372 | 99.230 | 1.00 | 40.46 | C |
| ATOM | 5230 | CD  | ARG B 253 | 7.047 | 78.247 | 97.972 | 1.00 | 43.75 | C |
| ATOM | 5231 | NE  | ARG B 253 | 7.259 | 79.371 | 97.059 | 1.00 | 44.79 | N |
| ATOM | 5232 | CZ  | ARG B 253 | 6.939 | 80.629 | 97.344 | 1.00 | 46.65 | C |
| ATOM | 5233 | NH1 | ARG B 253 | 6.392 | 80.929 | 98.514 | 1.00 | 47.32 | N |
| ATOM | 5234 | NH2 | ARG B 253 | 7.166 | 81.591 | 96.460 | 1.00 | 48.69 | N |
| ATOM | 5235 | N   | THR B 254 | 11.276 | 75.928 | 97.535 | 1.00 | 33.87 | N |
| ATOM | 5236 | CA  | THR B 254 | 12.589 | 75.619 | 96.977 | 1.00 | 32.93 | C |
| ATOM | 5237 | C   | THR B 254 | 13.182 | 76.840 | 96.269 | 1.00 | 34.43 | C |
| ATOM | 5238 | O   | THR B 254 | 12.497 | 77.837 | 96.059 | 1.00 | 33.91 | O |
| ATOM | 5239 | CB  | THR B 254 | 12.492 | 74.475 | 95.949 | 1.00 | 32.00 | C |

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ATOM   5240  OG1 THR B 254      11.670  74.896  94.851  1.00 26.15           O
ATOM   5241  CG2 THR B 254      11.884  73.228  96.588  1.00 29.15           C
ATOM   5242  N   ARG B 255      14.458  76.761  95.902  1.00 36.71           N
ATOM   5243  CA  ARG B 255      15.116  77.867  95.206  1.00 38.10           C
ATOM   5244  C   ARG B 255      14.370  78.213  93.925  1.00 36.99           C
ATOM   5245  O   ARG B 255      14.305  79.378  93.528  1.00 36.33           O
ATOM   5246  CB  ARG B 255      16.563  77.511  94.846  1.00 41.22           C
ATOM   5247  CG  ARG B 255      17.514  77.525  96.019  1.00 49.27           C
ATOM   5248  CD  ARG B 255      18.959  77.200  95.611  1.00 53.63           C
ATOM   5249  NE  ARG B 255      19.757  78.401  95.386  1.00 58.71           N
ATOM   5250  CZ  ARG B 255      19.965  79.349  96.299  1.00 61.44           C
ATOM   5251  NH1 ARG B 255      19.436  79.249  97.514  1.00 61.98           N
ATOM   5252  NH2 ARG B 255      20.705  80.407  95.994  1.00 63.53           N
ATOM   5253  N   GLU B 256      13.817  77.193  93.274  1.00 34.54           N
ATOM   5254  CA  GLU B 256      13.085  77.392  92.029  1.00 32.92           C
ATOM   5255  C   GLU B 256      11.709  78.008  92.258  1.00 32.31           C
ATOM   5256  O   GLU B 256      11.049  78.426  91.312  1.00 32.48           O
ATOM   5257  CB  GLU B 256      12.927  76.063  91.276  1.00 32.25           C
ATOM   5258  CG  GLU B 256      14.239  75.353  90.981  1.00 31.74           C
ATOM   5259  CD  GLU B 256      14.615  74.352  92.056  1.00 32.35           C
ATOM   5260  OE1 GLU B 256      14.337  74.610  93.245  1.00 33.14           O
ATOM   5261  OE2 GLU B 256      15.202  73.309  91.712  1.00 34.81           O
ATOM   5262  N   GLY B 257      11.278  78.061  93.514  1.00 31.36           N
ATOM   5263  CA  GLY B 257       9.983  78.633  93.818  1.00 29.41           C
ATOM   5264  C   GLY B 257       8.868  77.614  93.948  1.00 29.06           C
ATOM   5265  O   GLY B 257       7.704  77.988  94.053  1.00 30.14           O
ATOM   5266  N   PHE B 258       9.208  76.329  93.932  1.00 28.91           N
ATOM   5267  CA  PHE B 258       8.200  75.283  94.070  1.00 27.90           C
ATOM   5268  C   PHE B 258       7.795  75.168  95.538  1.00 28.39           C
ATOM   5269  O   PHE B 258       8.476  75.695  96.418  1.00 28.99           O
ATOM   5270  CB  PHE B 258       8.740  73.924  93.596  1.00 25.76           C
ATOM   5271  CG  PHE B 258       9.213  73.911  92.167  1.00 25.13           C
ATOM   5272  CD1 PHE B 258       8.465  74.517  91.161  1.00 25.03           C
ATOM   5273  CD2 PHE B 258      10.397  73.267  91.824  1.00 24.00           C
ATOM   5274  CE1 PHE B 258       8.895  74.478  89.827  1.00 23.73           C
ATOM   5275  CE2 PHE B 258      10.833  73.221  90.506  1.00 25.62           C
ATOM   5276  CZ  PHE B 258      10.079  73.830  89.502  1.00 25.09           C
ATOM   5277  N   TYR B 259       6.684  74.481  95.794  1.00 28.00           N
ATOM   5278  CA  TYR B 259       6.194  74.280  97.152  1.00 25.77           C
ATOM   5279  C   TYR B 259       6.285  72.799  97.513  1.00 28.23           C
ATOM   5280  O   TYR B 259       6.003  71.925  96.683  1.00 27.13           O
ATOM   5281  CB  TYR B 259       4.728  74.700  97.282  1.00 25.32           C
ATOM   5282  CG  TYR B 259       4.434  76.174  97.074  1.00 25.89           C
ATOM   5283  CD1 TYR B 259       4.598  76.778  95.824  1.00 24.11           C
ATOM   5284  CD2 TYR B 259       3.963  76.961  98.126  1.00 24.87           C
ATOM   5285  CE1 TYR B 259       4.297  78.130  95.631  1.00 23.13           C
ATOM   5286  CE2 TYR B 259       3.660  78.313  97.939  1.00 25.34           C
ATOM   5287  CZ  TYR B 259       3.828  78.886  96.693  1.00 23.52           C
ATOM   5288  OH  TYR B 259       3.520  80.215  96.518  1.00 28.32           O
ATOM   5289  N   ARG B 260       6.685  72.521  98.750  1.00 27.65           N
ATOM   5290  CA  ARG B 260       6.759  71.152  99.227  1.00 29.53           C
ATOM   5291  C   ARG B 260       5.319  70.740  99.503  1.00 30.07           C
ATOM   5292  O   ARG B 260       4.507  71.559  99.940  1.00 30.29           O
ATOM   5293  CB  ARG B 260       7.574  71.069 100.521  1.00 31.21           C
ATOM   5294  CG  ARG B 260       9.069  71.185 100.327  1.00 32.27           C
ATOM   5295  CD  ARG B 260       9.603  69.985  99.568  1.00 34.27           C
ATOM   5296  NE  ARG B 260      11.025  70.117  99.280  1.00 35.76           N
ATOM   5297  CZ  ARG B 260      11.696  69.306  98.473  1.00 36.96           C
ATOM   5298  NH1 ARG B 260      11.072  68.301  97.875  1.00 39.49           N
ATOM   5299  NH2 ARG B 260      12.986  69.505  98.252  1.00 37.51           N
ATOM   5300  N   THR B 261       5.004  69.478  99.240  1.00 29.35           N
ATOM   5301  CA  THR B 261       3.658  68.965  99.458  1.00 28.11           C
ATOM   5302  C   THR B 261       3.763  67.520  99.940  1.00 28.62           C
ATOM   5303  O   THR B 261       4.662  66.787  99.527  1.00 27.03           O
ATOM   5304  CB  THR B 261       2.831  69.017  98.148  1.00 27.47           C
ATOM   5305  OG1 THR B 261       1.492  68.566  98.398  1.00 26.60           O
ATOM   5306  CG2 THR B 261       3.479  68.137  97.078  1.00 25.96           C
ATOM   5307  N   LYS B 262       2.848  67.120 100.818  1.00 30.09           N
ATOM   5308  CA  LYS B 262       2.855  65.764 101.360  1.00 31.51           C
ATOM   5309  C   LYS B 262       2.329  64.755 100.346  1.00 30.00           C
ATOM   5310  O   LYS B 262       1.164  64.807  99.956  1.00 29.01           O
ATOM   5311  CB  LYS B 262       2.014  65.710 102.637  1.00 33.30           C
ATOM   5312  CG  LYS B 262       2.545  66.594 103.751  1.00 39.93           C
ATOM   5313  CD  LYS B 262       1.672  66.519 105.000  1.00 44.64           C
ATOM   5314  CE  LYS B 262       2.251  67.362 106.131  1.00 46.86           C
ATOM   5315  NZ  LYS B 262       3.636  66.925 106.490  1.00 49.39           N
ATOM   5316  N   ASN B 263       3.196  63.835  99.928  1.00 30.14           N
ATOM   5317  CA  ASN B 263       2.827  62.811  98.950  1.00 30.65           C
ATOM   5318  C   ASN B 263       2.092  61.641  99.590  1.00 30.53           C
ATOM   5319  O   ASN B 263       1.858  61.625 100.794  1.00 30.86           O
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ATOM   5320  CB  ASN B 263       4.075  62.287  98.233  1.00 30.25           C
ATOM   5321  CG  ASN B 263       5.081  61.677  99.189  1.00 31.80           C
ATOM   5322  OD1 ASN B 263       5.529  62.331 100.128  1.00 31.30           O
ATOM   5323  ND2 ASN B 263       5.442  60.417  98.953  1.00 30.12           N
ATOM   5324  N   GLY B 264       1.733  60.656  98.774  1.00 31.03           N
ATOM   5325  CA  GLY B 264       1.034  59.498  99.295  1.00 29.51           C
ATOM   5326  C   GLY B 264      -0.276  59.253  98.580  1.00 30.32           C
ATOM   5327  O   GLY B 264      -0.626  59.965  97.638  1.00 27.62           O
ATOM   5328  N   ILE B 265      -1.007  58.247  99.049  1.00 30.52           N
ATOM   5329  CA  ILE B 265      -2.278  57.867  98.462  1.00 32.28           C
ATOM   5330  C   ILE B 265      -3.393  58.880  98.703  1.00 32.57           C
ATOM   5331  O   ILE B 265      -4.284  59.035  97.866  1.00 32.10           O
ATOM   5332  CB  ILE B 265      -2.733  56.493  98.998  1.00 34.01           C
ATOM   5333  CG1 ILE B 265      -3.947  56.002  98.212  1.00 33.84           C
ATOM   5334  CG2 ILE B 265      -3.075  56.599 100.481  1.00 33.57           C
ATOM   5335  CD1 ILE B 265      -4.324  54.565  98.515  1.00 35.36           C
ATOM   5336  N   GLU B 266      -3.349  59.570  99.840  1.00 32.28           N
ATOM   5337  CA  GLU B 266      -4.385  60.543 100.153  1.00 31.43           C
ATOM   5338  C   GLU B 266      -4.523  61.604  99.058  1.00 29.42           C
ATOM   5339  O   GLU B 266      -5.633  61.888  98.609  1.00 27.64           O
ATOM   5340  CB  GLU B 266      -4.122  61.187 101.521  1.00 35.47           C
ATOM   5341  CG  GLU B 266      -5.153  62.244 101.913  1.00 43.06           C
ATOM   5342  CD  GLU B 266      -5.096  62.626 103.390  1.00 47.22           C
ATOM   5343  OE1 GLU B 266      -3.979  62.697 103.951  1.00 48.57           O
ATOM   5344  OE2 GLU B 266      -6.174  62.871 103.984  1.00 48.38           O
ATOM   5345  N   PRO B 267      -3.401  62.202  98.610  1.00 27.44           N
ATOM   5346  CA  PRO B 267      -3.469  63.222  97.554  1.00 26.48           C
ATOM   5347  C   PRO B 267      -3.964  62.626  96.230  1.00 25.48           C
ATOM   5348  O   PRO B 267      -4.682  63.280  95.472  1.00 25.93           O
ATOM   5349  CB  PRO B 267      -2.024  63.713  97.448  1.00 24.89           C
ATOM   5350  CG  PRO B 267      -1.496  63.499  98.813  1.00 27.18           C
ATOM   5351  CD  PRO B 267      -2.050  62.151  99.189  1.00 27.19           C
ATOM   5352  N   CYS B 268      -3.568  61.384  95.959  1.00 24.68           N
ATOM   5353  CA  CYS B 268      -3.968  60.696  94.733  1.00 24.26           C
ATOM   5354  C   CYS B 268      -5.467  60.483  94.700  1.00 24.80           C
ATOM   5355  O   CYS B 268      -6.101  60.615  93.654  1.00 25.33           O
ATOM   5356  CB  CYS B 268      -3.264  59.344  94.625  1.00 22.93           C
ATOM   5357  SG  CYS B 268      -1.496  59.490  94.432  1.00 22.58           S
ATOM   5358  N   ILE B 269      -6.029  60.142  95.853  1.00 25.90           N
ATOM   5359  CA  ILE B 269      -7.463  59.920  95.967  1.00 25.27           C
ATOM   5360  C   ILE B 269      -8.201  61.236  95.730  1.00 25.15           C
ATOM   5361  O   ILE B 269      -9.182  61.278  94.991  1.00 26.65           O
ATOM   5362  CB  ILE B 269      -7.824  59.359  97.366  1.00 25.27           C
ATOM   5363  CG1 ILE B 269      -7.314  57.919  97.487  1.00 24.44           C
ATOM   5364  CG2 ILE B 269      -9.324  59.426  97.596  1.00 23.47           C
ATOM   5365  CD1 ILE B 269      -7.404  57.346  98.895  1.00 22.64           C
ATOM   5366  N   ALA B 270      -7.717  62.313  96.340  1.00 23.32           N
ATOM   5367  CA  ALA B 270      -8.362  63.612  96.178  1.00 23.33           C
ATOM   5368  C   ALA B 270      -8.350  64.039  94.716  1.00 23.40           C
ATOM   5369  O   ALA B 270      -9.391  64.364  94.140  1.00 24.89           O
ATOM   5370  CB  ALA B 270      -7.661  64.662  97.040  1.00 22.77           C
ATOM   5371  N   ARG B 271      -7.168  64.030  94.115  1.00 22.04           N
ATOM   5372  CA  ARG B 271      -7.028  64.420  92.722  1.00 21.37           C
ATOM   5373  C   ARG B 271      -7.843  63.518  91.798  1.00 21.65           C
ATOM   5374  O   ARG B 271      -8.453  63.991  90.836  1.00 21.24           O
ATOM   5375  CB  ARG B 271      -5.549  64.397  92.330  1.00 21.35           C
ATOM   5376  CG  ARG B 271      -4.767  65.553  92.925  1.00 20.45           C
ATOM   5377  CD  ARG B 271      -3.268  65.414  92.721  1.00 20.72           C
ATOM   5378  NE  ARG B 271      -2.583  66.640  93.114  1.00 18.81           N
ATOM   5379  CZ  ARG B 271      -2.236  67.610  92.277  1.00 20.55           C
ATOM   5380  NH1 ARG B 271      -2.489  67.504  90.978  1.00 23.32           N
ATOM   5381  NH2 ARG B 271      -1.663  68.708  92.745  1.00 22.81           N
ATOM   5382  N   ALA B 272      -7.869  62.223  92.102  1.00 20.59           N
ATOM   5383  CA  ALA B 272      -8.613  61.278  91.285  1.00 22.95           C
ATOM   5384  C   ALA B 272     -10.094  61.627  91.283  1.00 24.93           C
ATOM   5385  O   ALA B 272     -10.757  61.542  90.247  1.00 26.59           O
ATOM   5386  CB  ALA B 272      -8.403  59.859  91.797  1.00 23.34           C
ATOM   5387  N   LYS B 273     -10.614  62.020  92.442  1.00 24.50           N
ATOM   5388  CA  LYS B 273     -12.018  62.392  92.547  1.00 25.24           C
ATOM   5389  C   LYS B 273     -12.269  63.655  91.744  1.00 24.72           C
ATOM   5390  O   LYS B 273     -13.312  63.805  91.115  1.00 26.86           O
ATOM   5391  CB  LYS B 273     -12.405  62.629  94.008  1.00 26.49           C
ATOM   5392  CG  LYS B 273     -12.389  61.367  94.856  1.00 29.44           C
ATOM   5393  CD  LYS B 273     -12.641  61.694  96.318  1.00 30.81           C
ATOM   5394  CE  LYS B 273     -12.678  60.433  97.168  1.00 31.90           C
ATOM   5395  NZ  LYS B 273     -12.948  60.745  98.601  1.00 33.19           N
ATOM   5396  N   ALA B 274     -11.309  64.568  91.767  1.00 24.11           N
ATOM   5397  CA  ALA B 274     -11.453  65.810  91.026  1.00 24.38           C
ATOM   5398  C   ALA B 274     -11.376  65.600  89.508  1.00 24.82           C
ATOM   5399  O   ALA B 274     -12.027  66.326  88.755  1.00 25.42           O
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ATOM   5400  CB  ALA B 274     -10.391  66.810  91.476  1.00 24.52           C
ATOM   5401  N   TYR B 275     -10.593  64.613  89.062  1.00 24.62           N
ATOM   5402  CA  TYR B 275     -10.446  64.335  87.626  1.00 23.06           C
ATOM   5403  C   TYR B 275     -11.541  63.440  87.054  1.00 23.16           C
ATOM   5404  O   TYR B 275     -11.819  63.493  85.860  1.00 22.90           O
ATOM   5405  CB  TYR B 275      -9.113  63.643  87.313  1.00 20.87           C
ATOM   5406  CG  TYR B 275      -7.859  64.325  87.808  1.00 19.51           C
ATOM   5407  CD1 TYR B 275      -7.806  65.707  87.994  1.00 19.88           C
ATOM   5408  CD2 TYR B 275      -6.706  63.582  88.062  1.00 18.91           C
ATOM   5409  CE1 TYR B 275      -6.631  66.331  88.426  1.00 17.72           C
ATOM   5410  CE2 TYR B 275      -5.534  64.189  88.488  1.00 19.07           C
ATOM   5411  CZ  TYR B 275      -5.500  65.561  88.671  1.00 19.43           C
ATOM   5412  OH  TYR B 275      -4.341  66.151  89.119  1.00 20.08           O
ATOM   5413  N   ALA B 276     -12.140  62.610  87.906  1.00 24.38           N
ATOM   5414  CA  ALA B 276     -13.179  61.651  87.502  1.00 23.60           C
ATOM   5415  C   ALA B 276     -14.186  62.103  86.438  1.00 23.68           C
ATOM   5416  O   ALA B 276     -14.446  61.379  85.473  1.00 23.97           O
ATOM   5417  CB  ALA B 276     -13.930  61.157  88.740  1.00 21.71           C
ATOM   5418  N   PRO B 277     -14.774  63.298  86.604  1.00 23.23           N
ATOM   5419  CA  PRO B 277     -15.751  63.787  85.628  1.00 23.16           C
ATOM   5420  C   PRO B 277     -15.123  64.065  84.269  1.00 24.43           C
ATOM   5421  O   PRO B 277     -15.821  64.154  83.256  1.00 24.01           O
ATOM   5422  CB  PRO B 277     -16.282  65.066  86.274  1.00 22.72           C
ATOM   5423  CG  PRO B 277     -16.030  64.862  87.736  1.00 21.60           C
ATOM   5424  CD  PRO B 277     -14.662  64.235  87.734  1.00 23.80           C
ATOM   5425  N   PHE B 278     -13.801  64.189  84.253  1.00 24.25           N
ATOM   5426  CA  PHE B 278     -13.078  64.491  83.026  1.00 23.48           C
ATOM   5427  C   PHE B 278     -12.208  63.336  82.543  1.00 22.91           C
ATOM   5428  O   PHE B 278     -11.345  63.527  81.689  1.00 22.06           O
ATOM   5429  CB  PHE B 278     -12.211  65.727  83.259  1.00 23.95           C
ATOM   5430  CG  PHE B 278     -12.979  66.912  83.778  1.00 24.38           C
ATOM   5431  CD1 PHE B 278     -13.701  67.727  82.912  1.00 25.77           C
ATOM   5432  CD2 PHE B 278     -13.017  67.186  85.142  1.00 24.87           C
ATOM   5433  CE1 PHE B 278     -14.457  68.803  83.400  1.00 25.17           C
ATOM   5434  CE2 PHE B 278     -13.766  68.254  85.638  1.00 22.96           C
ATOM   5435  CZ  PHE B 278     -14.488  69.064  84.766  1.00 22.03           C
ATOM   5436  N   ALA B 279     -12.441  62.139  83.068  1.00 22.08           N
ATOM   5437  CA  ALA B 279     -11.629  60.996  82.674  1.00 24.09           C
ATOM   5438  C   ALA B 279     -12.385  59.681  82.507  1.00 23.78           C
ATOM   5439  O   ALA B 279     -13.154  59.276  83.381  1.00 25.52           O
ATOM   5440  CB  ALA B 279     -10.493  60.811  83.683  1.00 24.45           C
ATOM   5441  N   ASP B 280     -12.144  59.009  81.383  1.00 23.32           N
ATOM   5442  CA  ASP B 280     -12.777  57.725  81.109  1.00 23.12           C
ATOM   5443  C   ASP B 280     -12.095  56.637  81.943  1.00 23.59           C
ATOM   5444  O   ASP B 280     -12.667  55.578  82.201  1.00 22.56           O
ATOM   5445  CB  ASP B 280     -12.683  57.387  79.617  1.00 22.51           C
ATOM   5446  CG  ASP B 280     -13.372  58.424  78.737  1.00 23.40           C
ATOM   5447  OD1 ASP B 280     -14.504  58.834  79.064  1.00 23.10           O
ATOM   5448  OD2 ASP B 280     -12.792  58.821  77.709  1.00 21.68           O
ATOM   5449  N   LEU B 281     -10.860  56.907  82.353  1.00 24.16           N
ATOM   5450  CA  LEU B 281     -10.096  55.984  83.189  1.00 24.20           C
ATOM   5451  C   LEU B 281      -9.160  56.819  84.034  1.00 23.94           C
ATOM   5452  O   LEU B 281      -8.714  57.890  83.606  1.00 24.28           O
ATOM   5453  CB  LEU B 281      -9.270  55.008  82.347  1.00 24.24           C
ATOM   5454  CG  LEU B 281     -10.025  53.942  81.554  1.00 24.39           C
ATOM   5455  CD1 LEU B 281      -9.755  54.111  80.074  1.00 25.06           C
ATOM   5456  CD2 LEU B 281      -9.595  52.567  82.019  1.00 23.22           C
ATOM   5457  N   ILE B 282      -8.871  56.339  85.237  1.00 22.69           N
ATOM   5458  CA  ILE B 282      -7.976  57.053  86.130  1.00 21.64           C
ATOM   5459  C   ILE B 282      -6.850  56.127  86.544  1.00 21.77           C
ATOM   5460  O   ILE B 282      -7.068  54.954  86.848  1.00 21.53           O
ATOM   5461  CB  ILE B 282      -8.722  57.570  87.365  1.00 24.47           C
ATOM   5462  CG1 ILE B 282      -9.887  58.456  86.915  1.00 23.67           C
ATOM   5463  CG2 ILE B 282      -7.762  58.340  88.270  1.00 22.15           C
ATOM   5464  CD1 ILE B 282     -10.643  59.120  88.046  1.00 28.03           C
ATOM   5465  N   TRP B 283      -5.639  56.670  86.550  1.00 21.82           N
ATOM   5466  CA  TRP B 283      -4.449  55.907  86.877  1.00 20.80           C
ATOM   5467  C   TRP B 283      -3.596  56.584  87.944  1.00 22.22           C
ATOM   5468  O   TRP B 283      -3.329  57.779  87.889  1.00 23.02           O
ATOM   5469  CB  TRP B 283      -3.672  55.682  85.574  1.00 21.00           C
ATOM   5470  CG  TRP B 283      -2.209  55.328  85.657  1.00 20.99           C
ATOM   5471  CD1 TRP B 283      -1.543  54.755  86.704  1.00 19.78           C
ATOM   5472  CD2 TRP B 283      -1.245  55.480  84.603  1.00 18.38           C
ATOM   5473  NE1 TRP B 283      -0.222  54.544  86.367  1.00 18.82           N
ATOM   5474  CE2 TRP B 283      -0.015  54.978  85.084  1.00 18.20           C
ATOM   5475  CE3 TRP B 283      -1.305  55.989  83.299  1.00 17.32           C
ATOM   5476  CZ2 TRP B 283       1.152  54.971  84.303  1.00 19.26           C
ATOM   5477  CZ3 TRP B 283      -0.146  55.981  82.520  1.00 18.71           C
ATOM   5478  CH2 TRP B 283       1.066  55.475  83.028  1.00 18.14           C
ATOM   5479  N   MET B 284      -3.179  55.794  88.926  1.00 23.17           N
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| ATOM | 5480 | CA | MET B 284 | -2.352 | 56.278 | 90.017 | 1.00 23.56 | C |
|---|---|---|---|---|---|---|---|---|
| ATOM | 5481 | C | MET B 284 | -0.997 | 55.580 | 89.984 | 1.00 23.26 | C |
| ATOM | 5482 | O | MET B 284 | -0.931 | 54.362 | 90.093 | 1.00 24.37 | O |
| ATOM | 5483 | CB | MET B 284 | -3.038 | 55.972 | 91.351 | 1.00 24.29 | C |
| ATOM | 5484 | CG | MET B 284 | -2.176 | 56.218 | 92.573 | 1.00 24.76 | C |
| ATOM | 5485 | SD | MET B 284 | -2.885 | 55.497 | 94.069 | 1.00 25.14 | S |
| ATOM | 5486 | CE | MET B 284 | -1.482 | 55.567 | 95.155 | 1.00 24.71 | C |
| ATOM | 5487 | N | GLU B 285 | 0.082 | 56.334 | 89.822 | 1.00 23.40 | N |
| ATOM | 5488 | CA | GLU B 285 | 1.403 | 55.714 | 89.825 | 1.00 25.48 | C |
| ATOM | 5489 | C | GLU B 285 | 1.718 | 55.300 | 91.255 | 1.00 26.04 | C |
| ATOM | 5490 | O | GLU B 285 | 1.370 | 56.009 | 92.198 | 1.00 26.47 | O |
| ATOM | 5491 | CB | GLU B 285 | 2.474 | 56.689 | 89.329 | 1.00 24.79 | C |
| ATOM | 5492 | CG | GLU B 285 | 2.551 | 56.828 | 87.815 | 1.00 25.62 | C |
| ATOM | 5493 | CD | GLU B 285 | 3.043 | 55.557 | 87.134 | 1.00 26.81 | C |
| ATOM | 5494 | OE1 | GLU B 285 | 2.289 | 54.564 | 87.082 | 1.00 27.96 | O |
| ATOM | 5495 | OE2 | GLU B 285 | 4.194 | 55.549 | 86.654 | 1.00 27.54 | O |
| ATOM | 5496 | N | THR B 286 | 2.358 | 54.146 | 91.420 | 1.00 25.37 | N |
| ATOM | 5497 | CA | THR B 286 | 2.714 | 53.667 | 92.751 | 1.00 26.55 | C |
| ATOM | 5498 | C | THR B 286 | 4.184 | 53.256 | 92.778 | 1.00 26.48 | C |
| ATOM | 5499 | O | THR B 286 | 4.772 | 52.976 | 91.741 | 1.00 25.95 | O |
| ATOM | 5500 | CB | THR B 286 | 1.826 | 52.470 | 93.176 | 1.00 26.77 | C |
| ATOM | 5501 | OG1 | THR B 286 | 2.017 | 51.372 | 92.276 | 1.00 25.95 | O |
| ATOM | 5502 | CG2 | THR B 286 | 0.355 | 52.872 | 93.158 | 1.00 28.26 | C |
| ATOM | 5503 | N | GLY B 287 | 4.776 | 53.232 | 93.967 | 1.00 28.30 | N |
| ATOM | 5504 | CA | GLY B 287 | 6.177 | 52.863 | 94.086 | 1.00 28.64 | C |
| ATOM | 5505 | C | GLY B 287 | 6.443 | 51.367 | 94.143 | 1.00 29.13 | C |
| ATOM | 5506 | O | GLY B 287 | 7.594 | 50.939 | 94.052 | 1.00 30.33 | O |
| ATOM | 5507 | N | THR B 288 | 5.387 | 50.569 | 94.294 | 1.00 28.84 | N |
| ATOM | 5508 | CA | THR B 288 | 5.517 | 49.114 | 94.366 | 1.00 27.07 | C |
| ATOM | 5509 | C | THR B 288 | 4.252 | 48.418 | 93.861 | 1.00 25.83 | C |
| ATOM | 5510 | O | THR B 288 | 3.180 | 49.019 | 93.812 | 1.00 22.79 | O |
| ATOM | 5511 | CB | THR B 288 | 5.730 | 48.630 | 95.823 | 1.00 27.87 | C |
| ATOM | 5512 | OG1 | THR B 288 | 4.545 | 48.895 | 96.581 | 1.00 28.19 | O |
| ATOM | 5513 | CG2 | THR B 288 | 6.902 | 49.341 | 96.476 | 1.00 27.46 | C |
| ATOM | 5514 | N | PRO B 289 | 4.367 | 47.138 | 93.470 | 1.00 26.62 | N |
| ATOM | 5515 | CA | PRO B 289 | 3.210 | 46.378 | 92.984 | 1.00 28.37 | C |
| ATOM | 5516 | C | PRO B 289 | 2.474 | 45.870 | 94.229 | 1.00 29.55 | C |
| ATOM | 5517 | O | PRO B 289 | 2.823 | 44.831 | 94.788 | 1.00 31.89 | O |
| ATOM | 5518 | CB | PRO B 289 | 3.857 | 45.258 | 92.175 | 1.00 27.04 | C |
| ATOM | 5519 | CG | PRO B 289 | 5.094 | 44.972 | 92.958 | 1.00 28.29 | C |
| ATOM | 5520 | CD | PRO B 289 | 5.610 | 46.357 | 93.317 | 1.00 27.48 | C |
| ATOM | 5521 | N | ASP B 290 | 1.463 | 46.615 | 94.661 | 1.00 30.25 | N |
| ATOM | 5522 | CA | ASP B 290 | 0.729 | 46.280 | 95.874 | 1.00 31.16 | C |
| ATOM | 5523 | C | ASP B 290 | -0.789 | 46.232 | 95.705 | 1.00 30.66 | C |
| ATOM | 5524 | O | ASP B 290 | -1.444 | 47.268 | 95.607 | 1.00 30.86 | O |
| ATOM | 5525 | CB | ASP B 290 | 1.084 | 47.305 | 96.950 | 1.00 33.07 | C |
| ATOM | 5526 | CG | ASP B 290 | 0.664 | 46.871 | 98.329 | 1.00 34.42 | C |
| ATOM | 5527 | OD1 | ASP B 290 | -0.527 | 46.563 | 98.531 | 1.00 35.13 | O |
| ATOM | 5528 | OD2 | ASP B 290 | 1.538 | 46.847 | 99.216 | 1.00 37.93 | O |
| ATOM | 5529 | N | LEU B 291 | -1.344 | 45.025 | 95.705 | 1.00 30.06 | N |
| ATOM | 5530 | CA | LEU B 291 | -2.779 | 44.841 | 95.547 | 1.00 30.29 | C |
| ATOM | 5531 | C | LEU B 291 | -3.590 | 45.548 | 96.627 | 1.00 30.49 | C |
| ATOM | 5532 | O | LEU B 291 | -4.699 | 46.018 | 96.368 | 1.00 30.36 | O |
| ATOM | 5533 | CB | LEU B 291 | -3.119 | 43.346 | 95.536 | 1.00 29.01 | C |
| ATOM | 5534 | CG | LEU B 291 | -2.645 | 42.538 | 94.324 | 1.00 28.57 | C |
| ATOM | 5535 | CD1 | LEU B 291 | -3.049 | 41.080 | 94.484 | 1.00 27.32 | C |
| ATOM | 5536 | CD2 | LEU B 291 | -3.255 | 43.121 | 93.054 | 1.00 29.12 | C |
| ATOM | 5537 | N | GLU B 292 | -3.042 | 45.624 | 97.835 | 1.00 30.47 | N |
| ATOM | 5538 | CA | GLU B 292 | -3.744 | 46.280 | 98.927 | 1.00 31.51 | C |
| ATOM | 5539 | C | GLU B 292 | -3.802 | 47.793 | 98.726 | 1.00 29.55 | C |
| ATOM | 5540 | O | GLU B 292 | -4.829 | 48.418 | 98.985 | 1.00 30.30 | O |
| ATOM | 5541 | CB | GLU B 292 | -3.082 | 45.958 | 100.265 | 1.00 34.24 | C |
| ATOM | 5542 | CG | GLU B 292 | -4.092 | 45.635 | 101.351 | 1.00 42.81 | C |
| ATOM | 5543 | CD | GLU B 292 | -5.219 | 46.662 | 101.433 | 1.00 45.79 | C |
| ATOM | 5544 | OE1 | GLU B 292 | -4.972 | 47.793 | 101.909 | 1.00 48.69 | O |
| ATOM | 5545 | OE2 | GLU B 292 | -6.353 | 46.338 | 101.015 | 1.00 46.85 | O |
| ATOM | 5546 | N | ALA B 293 | -2.703 | 48.387 | 98.271 | 1.00 27.71 | N |
| ATOM | 5547 | CA | ALA B 293 | -2.694 | 49.827 | 98.027 | 1.00 27.46 | C |
| ATOM | 5548 | C | ALA B 293 | -3.667 | 50.109 | 96.887 | 1.00 26.46 | C |
| ATOM | 5549 | O | ALA B 293 | -4.403 | 51.093 | 96.911 | 1.00 27.16 | O |
| ATOM | 5550 | CB | ALA B 293 | -1.289 | 50.304 | 97.655 | 1.00 26.19 | C |
| ATOM | 5551 | N | ALA B 294 | -3.674 | 49.230 | 95.890 | 1.00 26.21 | N |
| ATOM | 5552 | CA | ALA B 294 | -4.573 | 49.391 | 94.750 | 1.00 26.81 | C |
| ATOM | 5553 | C | ALA B 294 | -6.021 | 49.319 | 95.216 | 1.00 27.95 | C |
| ATOM | 5554 | O | ALA B 294 | -6.860 | 50.104 | 94.772 | 1.00 28.94 | O |
| ATOM | 5555 | CB | ALA B 294 | -4.304 | 48.316 | 93.701 | 1.00 23.10 | C |
| ATOM | 5556 | N | ARG B 295 | -6.316 | 48.380 | 96.114 | 1.00 29.40 | N |
| ATOM | 5557 | CA | ARG B 295 | -7.678 | 48.235 | 96.634 | 1.00 31.28 | C |
| ATOM | 5558 | C | ARG B 295 | -8.107 | 49.534 | 97.317 | 1.00 29.50 | C |
| ATOM | 5559 | O | ARG B 295 | -9.187 | 50.059 | 97.069 | 1.00 28.92 | O |

| ATOM | 5560 | CB  | ARG | B | 295 | -7.747  | 47.091 | 97.650  | 1.00 | 31.77 | C |
| ATOM | 5561 | CG  | ARG | B | 295 | -9.127  | 46.894 | 98.261  | 1.00 | 35.22 | C |
| ATOM | 5562 | CD  | ARG | B | 295 | -9.036  | 46.271 | 99.652  | 1.00 | 38.24 | C |
| ATOM | 5563 | NE  | ARG | B | 295 | -8.369  | 44.973 | 99.630  | 1.00 | 39.22 | N |
| ATOM | 5564 | CZ  | ARG | B | 295 | -8.860  | 43.897 | 99.026  | 1.00 | 41.94 | C |
| ATOM | 5565 | NH1 | ARG | B | 295 | -10.027 | 43.966 | 98.396  | 1.00 | 44.10 | N |
| ATOM | 5566 | NH2 | ARG | B | 295 | -8.184  | 42.755 | 99.045  | 1.00 | 40.96 | N |
| ATOM | 5567 | N   | GLN | B | 296 | -7.238  | 50.034 | 98.184  | 1.00 | 30.75 | N |
| ATOM | 5568 | CA  | GLN | B | 296 | -7.480  | 51.262 | 98.928  | 1.00 | 31.57 | C |
| ATOM | 5569 | C   | GLN | B | 296 | -7.846  | 52.408 | 97.985  | 1.00 | 30.52 | C |
| ATOM | 5570 | O   | GLN | B | 296 | -8.805  | 53.142 | 98.219  | 1.00 | 30.13 | O |
| ATOM | 5571 | CB  | GLN | B | 296 | -6.221  | 51.617 | 99.715  | 1.00 | 34.29 | C |
| ATOM | 5572 | CG  | GLN | B | 296 | -6.436  | 52.540 | 100.894 | 1.00 | 40.07 | C |
| ATOM | 5573 | CD  | GLN | B | 296 | -5.190  | 52.640 | 101.759 | 1.00 | 43.40 | C |
| ATOM | 5574 | OE1 | GLN | B | 296 | -4.515  | 51.637 | 102.017 | 1.00 | 43.55 | O |
| ATOM | 5575 | NE2 | GLN | B | 296 | -4.886  | 53.849 | 102.221 | 1.00 | 45.73 | N |
| ATOM | 5576 | N   | PHE | B | 297 | -7.070  | 52.551 | 96.918  | 1.00 | 28.75 | N |
| ATOM | 5577 | CA  | PHE | B | 297 | -7.291  | 53.603 | 95.931  | 1.00 | 27.15 | C |
| ATOM | 5578 | C   | PHE | B | 297 | -8.621  | 53.400 | 95.215  | 1.00 | 26.17 | C |
| ATOM | 5579 | O   | PHE | B | 297 | -9.440  | 54.315 | 95.130  | 1.00 | 25.04 | O |
| ATOM | 5580 | CB  | PHE | B | 297 | -6.141  | 53.599 | 94.913  | 1.00 | 27.96 | C |
| ATOM | 5581 | CG  | PHE | B | 297 | -6.283  | 54.622 | 93.822  | 1.00 | 27.09 | C |
| ATOM | 5582 | CD1 | PHE | B | 297 | -6.234  | 55.986 | 94.110  | 1.00 | 25.99 | C |
| ATOM | 5583 | CD2 | PHE | B | 297 | -6.461  | 54.222 | 92.502  | 1.00 | 25.74 | C |
| ATOM | 5584 | CE1 | PHE | B | 297 | -6.361  | 56.936 | 93.097  | 1.00 | 24.43 | C |
| ATOM | 5585 | CE2 | PHE | B | 297 | -6.589  | 55.166 | 91.479  | 1.00 | 25.30 | C |
| ATOM | 5586 | CZ  | PHE | B | 297 | -6.539  | 56.525 | 91.780  | 1.00 | 25.49 | C |
| ATOM | 5587 | N   | SER | B | 298 | -8.829  | 52.191 | 94.707  | 1.00 | 25.69 | N |
| ATOM | 5588 | CA  | SER | B | 298 | -10.047 | 51.862 | 93.982  | 1.00 | 27.61 | C |
| ATOM | 5589 | C   | SER | B | 298 | -11.320 | 52.068 | 94.786  | 1.00 | 28.06 | C |
| ATOM | 5590 | O   | SER | B | 298 | -12.273 | 52.677 | 94.303  | 1.00 | 26.40 | O |
| ATOM | 5591 | CB  | SER | B | 298 | -10.006 | 50.414 | 93.497  | 1.00 | 28.59 | C |
| ATOM | 5592 | OG  | SER | B | 298 | -11.196 | 50.106 | 92.789  | 1.00 | 30.35 | O |
| ATOM | 5593 | N   | GLU | B | 299 | -11.346 | 51.549 | 96.008  | 1.00 | 29.87 | N |
| ATOM | 5594 | CA  | GLU | B | 299 | -12.534 | 51.688 | 96.842  | 1.00 | 33.40 | C |
| ATOM | 5595 | C   | GLU | B | 299 | -12.848 | 53.143 | 97.173  | 1.00 | 32.82 | C |
| ATOM | 5596 | O   | GLU | B | 299 | -14.004 | 53.563 | 97.109  | 1.00 | 35.41 | O |
| ATOM | 5597 | CB  | GLU | B | 299 | -12.375 | 50.873 | 98.126  | 1.00 | 34.68 | C |
| ATOM | 5598 | CG  | GLU | B | 299 | -12.084 | 49.408 | 97.859  | 1.00 | 39.73 | C |
| ATOM | 5599 | CD  | GLU | B | 299 | -12.226 | 48.539 | 99.091  | 1.00 | 42.23 | C |
| ATOM | 5600 | OE1 | GLU | B | 299 | -11.648 | 48.893 | 100.143 | 1.00 | 43.65 | O |
| ATOM | 5601 | OE2 | GLU | B | 299 | -12.909 | 47.494 | 98.999  | 1.00 | 43.44 | O |
| ATOM | 5602 | N   | ALA | B | 300 | -11.820 | 53.913 | 97.515  | 1.00 | 31.93 | N |
| ATOM | 5603 | CA  | ALA | B | 300 | -11.999 | 55.322 | 97.852  | 1.00 | 31.88 | C |
| ATOM | 5604 | C   | ALA | B | 300 | -12.554 | 56.100 | 96.667  | 1.00 | 32.17 | C |
| ATOM | 5605 | O   | ALA | B | 300 | -13.425 | 56.953 | 96.830  | 1.00 | 32.64 | O |
| ATOM | 5606 | CB  | ALA | B | 300 | -10.675 | 55.927 | 98.296  | 1.00 | 30.16 | C |
| ATOM | 5607 | N   | VAL | B | 301 | -12.051 | 55.806 | 95.473  | 1.00 | 31.93 | N |
| ATOM | 5608 | CA  | VAL | B | 301 | -12.513 | 56.497 | 94.274  | 1.00 | 32.00 | C |
| ATOM | 5609 | C   | VAL | B | 301 | -13.924 | 56.077 | 93.884  | 1.00 | 31.98 | C |
| ATOM | 5610 | O   | VAL | B | 301 | -14.781 | 56.918 | 93.618  | 1.00 | 31.41 | O |
| ATOM | 5611 | CB  | VAL | B | 301 | -11.578 | 56.233 | 93.066  | 1.00 | 30.76 | C |
| ATOM | 5612 | CG1 | VAL | B | 301 | -12.171 | 56.849 | 91.799  | 1.00 | 29.67 | C |
| ATOM | 5613 | CG2 | VAL | B | 301 | -10.201 | 56.820 | 93.336  | 1.00 | 31.43 | C |
| ATOM | 5614 | N   | LYS | B | 302 | -14.161 | 54.772 | 93.839  | 1.00 | 32.91 | N |
| ATOM | 5615 | CA  | LYS | B | 302 | -15.470 | 54.261 | 93.464  | 1.00 | 34.73 | C |
| ATOM | 5616 | C   | LYS | B | 302 | -16.543 | 54.609 | 94.492  | 1.00 | 35.28 | C |
| ATOM | 5617 | O   | LYS | B | 302 | -17.732 | 54.558 | 94.190  | 1.00 | 35.08 | O |
| ATOM | 5618 | CB  | LYS | B | 302 | -15.402 | 52.749 | 93.250  | 1.00 | 34.91 | C |
| ATOM | 5619 | CG  | LYS | B | 302 | -14.716 | 52.340 | 91.951  | 1.00 | 35.78 | C |
| ATOM | 5620 | CD  | LYS | B | 302 | -14.718 | 50.825 | 91.787  | 1.00 | 35.65 | C |
| ATOM | 5621 | CE  | LYS | B | 302 | -14.236 | 50.403 | 90.405  | 1.00 | 36.98 | C |
| ATOM | 5622 | NZ  | LYS | B | 302 | -15.157 | 50.855 | 89.324  | 1.00 | 37.57 | N |
| ATOM | 5623 | N   | ALA | B | 303 | -16.117 | 54.974 | 95.698  | 1.00 | 36.03 | N |
| ATOM | 5624 | CA  | ALA | B | 303 | -17.048 | 55.343 | 96.759  | 1.00 | 37.66 | C |
| ATOM | 5625 | C   | ALA | B | 303 | -17.852 | 56.570 | 96.342  | 1.00 | 38.06 | C |
| ATOM | 5626 | O   | ALA | B | 303 | -18.953 | 56.798 | 96.840  | 1.00 | 38.73 | O |
| ATOM | 5627 | CB  | ALA | B | 303 | -16.287 | 55.630 | 98.052  | 1.00 | 37.40 | C |
| ATOM | 5628 | N   | GLU | B | 304 | -17.293 | 57.363 | 95.431  | 1.00 | 37.39 | N |
| ATOM | 5629 | CA  | GLU | B | 304 | -17.972 | 58.557 | 94.935  | 1.00 | 37.80 | C |
| ATOM | 5630 | C   | GLU | B | 304 | -18.312 | 58.427 | 93.454  | 1.00 | 36.74 | C |
| ATOM | 5631 | O   | GLU | B | 304 | -19.193 | 59.123 | 92.942  | 1.00 | 37.66 | O |
| ATOM | 5632 | CB  | GLU | B | 304 | -17.106 | 59.798 | 95.156  | 1.00 | 40.34 | C |
| ATOM | 5633 | CG  | GLU | B | 304 | -17.348 | 60.502 | 96.484  | 1.00 | 43.92 | C |
| ATOM | 5634 | CD  | GLU | B | 304 | -16.508 | 61.757 | 96.627  | 1.00 | 46.73 | C |
| ATOM | 5635 | OE1 | GLU | B | 304 | -16.493 | 62.569 | 95.679  | 1.00 | 47.83 | O |
| ATOM | 5636 | OE2 | GLU | B | 304 | -15.866 | 61.939 | 97.685  | 1.00 | 49.22 | O |
| ATOM | 5637 | N   | TYR | B | 305 | -17.612 | 57.528 | 92.771  | 1.00 | 35.51 | N |
| ATOM | 5638 | CA  | TYR | B | 305 | -17.827 | 57.290 | 91.347  | 1.00 | 34.51 | C |
| ATOM | 5639 | C   | TYR | B | 305 | -17.789 | 55.782 | 91.090  | 1.00 | 34.82 | C |

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ATOM   5640  O    TYR B 305     -16.808  55.245  90.578  1.00 34.60           O
ATOM   5641  CB   TYR B 305     -16.745  58.012  90.545  1.00 32.33           C
ATOM   5642  CG   TYR B 305     -16.813  59.520  90.675  1.00 31.22           C
ATOM   5643  CD1  TYR B 305     -17.745  60.259  89.947  1.00 30.45           C
ATOM   5644  CD2  TYR B 305     -15.954  60.207  91.534  1.00 29.06           C
ATOM   5645  CE1  TYR B 305     -17.820  61.650  90.068  1.00 31.19           C
ATOM   5646  CE2  TYR B 305     -16.021  61.601  91.665  1.00 30.52           C
ATOM   5647  CZ   TYR B 305     -16.957  62.315  90.926  1.00 31.44           C
ATOM   5648  OH   TYR B 305     -17.032  63.691  91.034  1.00 32.50           O
ATOM   5649  N    PRO B 306     -18.875  55.081  91.451  1.00 35.43           N
ATOM   5650  CA   PRO B 306     -19.037  53.633  91.300  1.00 35.56           C
ATOM   5651  C    PRO B 306     -18.632  53.057  89.946  1.00 35.05           C
ATOM   5652  O    PRO B 306     -18.011  51.994  89.882  1.00 36.02           O
ATOM   5653  CB   PRO B 306     -20.522  53.424  91.587  1.00 34.70           C
ATOM   5654  CG   PRO B 306     -20.820  54.497  92.573  1.00 33.67           C
ATOM   5655  CD   PRO B 306     -20.115  55.685  91.973  1.00 35.31           C
ATOM   5656  N    ASP B 307     -18.979  53.758  88.872  1.00 34.91           N
ATOM   5657  CA   ASP B 307     -18.672  53.288  87.524  1.00 33.68           C
ATOM   5658  C    ASP B 307     -17.328  53.754  86.964  1.00 32.33           C
ATOM   5659  O    ASP B 307     -17.009  53.468  85.810  1.00 31.98           O
ATOM   5660  CB   ASP B 307     -19.787  53.707  86.558  1.00 34.65           C
ATOM   5661  CG   ASP B 307     -21.155  53.210  86.995  1.00 38.50           C
ATOM   5662  OD1  ASP B 307     -21.248  52.056  87.464  1.00 40.53           O
ATOM   5663  OD2  ASP B 307     -22.140  53.965  86.858  1.00 39.74           O
ATOM   5664  N    GLN B 308     -16.542  54.469  87.764  1.00 29.81           N
ATOM   5665  CA   GLN B 308     -15.250  54.955  87.288  1.00 28.16           C
ATOM   5666  C    GLN B 308     -14.257  53.818  87.074  1.00 26.86           C
ATOM   5667  O    GLN B 308     -13.876  53.120  88.014  1.00 26.10           O
ATOM   5668  CB   GLN B 308     -14.657  55.963  88.269  1.00 27.50           C
ATOM   5669  CG   GLN B 308     -13.328  56.545  87.811  1.00 27.96           C
ATOM   5670  CD   GLN B 308     -13.437  57.297  86.492  1.00 28.23           C
ATOM   5671  OE1  GLN B 308     -12.741  56.980  85.525  1.00 31.07           O
ATOM   5672  NE2  GLN B 308     -14.307  58.298  86.448  1.00 24.92           N
ATOM   5673  N    MET B 309     -13.838  53.635  85.828  1.00 27.25           N
ATOM   5674  CA   MET B 309     -12.885  52.584  85.504  1.00 27.00           C
ATOM   5675  C    MET B 309     -11.472  53.066  85.797  1.00 25.93           C
ATOM   5676  O    MET B 309     -11.173  54.254  85.704  1.00 24.40           O
ATOM   5677  CB   MET B 309     -13.014  52.176  84.039  1.00 28.78           C
ATOM   5678  CG   MET B 309     -14.360  51.574  83.686  1.00 31.96           C
ATOM   5679  SD   MET B 309     -14.341  50.880  82.020  1.00 38.01           S
ATOM   5680  CE   MET B 309     -14.334  52.357  81.080  1.00 35.22           C
ATOM   5681  N    LEU B 310     -10.604  52.132  86.151  1.00 25.27           N
ATOM   5682  CA   LEU B 310      -9.233  52.470  86.490  1.00 24.80           C
ATOM   5683  C    LEU B 310      -8.214  51.736  85.619  1.00 23.86           C
ATOM   5684  O    LEU B 310      -8.525  50.732  84.981  1.00 22.47           O
ATOM   5685  CB   LEU B 310      -8.986  52.144  87.966  1.00 23.52           C
ATOM   5686  CG   LEU B 310     -10.032  52.668  88.958  1.00 24.44           C
ATOM   5687  CD1  LEU B 310      -9.752  52.101  90.334  1.00 23.04           C
ATOM   5688  CD2  LEU B 310     -10.024  54.188  88.990  1.00 22.59           C
ATOM   5689  N    ALA B 311      -6.992  52.255  85.599  1.00 24.28           N
ATOM   5690  CA   ALA B 311      -5.912  51.655  84.831  1.00 21.15           C
ATOM   5691  C    ALA B 311      -4.756  51.439  85.796  1.00 21.11           C
ATOM   5692  O    ALA B 311      -4.588  52.206  86.743  1.00 19.28           O
ATOM   5693  CB   ALA B 311      -5.495  52.581  83.698  1.00 21.66           C
ATOM   5694  N    TYR B 312      -3.959  50.398  85.559  1.00 21.61           N
ATOM   5695  CA   TYR B 312      -2.839  50.101  86.438  1.00 19.96           C
ATOM   5696  C    TYR B 312      -1.571  49.763  85.671  1.00 19.21           C
ATOM   5697  O    TYR B 312      -1.581  48.955  84.746  1.00 20.71           O
ATOM   5698  CB   TYR B 312      -3.206  48.953  87.392  1.00 19.39           C
ATOM   5699  CG   TYR B 312      -2.197  48.744  88.507  1.00 18.39           C
ATOM   5700  CD1  TYR B 312      -1.014  48.036  88.285  1.00 17.81           C
ATOM   5701  CD2  TYR B 312      -2.409  49.289  89.776  1.00 19.25           C
ATOM   5702  CE1  TYR B 312      -0.068  47.876  89.295  1.00 18.49           C
ATOM   5703  CE2  TYR B 312      -1.463  49.138  90.800  1.00 17.14           C
ATOM   5704  CZ   TYR B 312      -0.299  48.431  90.550  1.00 19.01           C
ATOM   5705  OH   TYR B 312       0.635  48.269  91.546  1.00 19.19           O
ATOM   5706  N    ASN B 313      -0.476  50.393  86.075  1.00 19.07           N
ATOM   5707  CA   ASN B 313       0.819  50.190  85.445  1.00 18.85           C
ATOM   5708  C    ASN B 313       1.615  49.088  86.136  1.00 19.17           C
ATOM   5709  O    ASN B 313       2.115  49.270  87.244  1.00 19.47           O
ATOM   5710  CB   ASN B 313       1.620  51.504  85.460  1.00 16.74           C
ATOM   5711  CG   ASN B 313       3.084  51.316  85.055  1.00 19.41           C
ATOM   5712  OD1  ASN B 313       3.454  50.316  84.427  1.00 16.95           O
ATOM   5713  ND2  ASN B 313       3.918  52.290  85.403  1.00 18.43           N
ATOM   5714  N    CYS B 314       1.706  47.939  85.479  1.00 18.56           N
ATOM   5715  CA   CYS B 314       2.471  46.815  85.996  1.00 20.94           C
ATOM   5716  C    CYS B 314       3.891  47.117  85.513  1.00 21.27           C
ATOM   5717  O    CYS B 314       4.378  46.554  84.531  1.00 21.33           O
ATOM   5718  CB   CYS B 314       1.939  45.509  85.404  1.00 20.25           C
ATOM   5719  SG   CYS B 314       0.231  45.122  85.924  1.00 21.82           S
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ATOM   5720  N    SER B 315      4.539  48.020  86.233  1.00 21.27           N
ATOM   5721  CA   SER B 315      5.863  48.511  85.889  1.00 23.76           C
ATOM   5722  C    SER B 315      7.095  47.642  86.056  1.00 23.96           C
ATOM   5723  O    SER B 315      7.287  46.995  87.082  1.00 24.97           O
ATOM   5724  CB   SER B 315      6.112  49.825  86.628  1.00 24.34           C
ATOM   5725  OG   SER B 315      7.418  50.300  86.377  1.00 22.01           O
ATOM   5726  N    PRO B 316      7.949  47.617  85.022  1.00 22.98           N
ATOM   5727  CA   PRO B 316      9.188  46.839  85.058  1.00 22.94           C
ATOM   5728  C    PRO B 316     10.162  47.586  85.974  1.00 23.68           C
ATOM   5729  O    PRO B 316     11.265  47.116  86.244  1.00 24.58           O
ATOM   5730  CB   PRO B 316      9.643  46.838  83.600  1.00 20.64           C
ATOM   5731  CG   PRO B 316      8.356  46.894  82.858  1.00 21.82           C
ATOM   5732  CD   PRO B 316      7.583  47.939  83.634  1.00 21.42           C
ATOM   5733  N    SER B 317      9.742  48.765  86.429  1.00 24.73           N
ATOM   5734  CA   SER B 317     10.548  49.574  87.336  1.00 25.42           C
ATOM   5735  C    SER B 317     10.445  48.978  88.730  1.00 27.54           C
ATOM   5736  O    SER B 317     11.050  49.477  89.679  1.00 29.34           O
ATOM   5737  CB   SER B 317     10.061  51.024  87.367  1.00 24.83           C
ATOM   5738  OG   SER B 317     10.537  51.752  86.251  1.00 23.52           O
ATOM   5739  N    PHE B 318      9.649  47.923  88.853  1.00 27.64           N
ATOM   5740  CA   PHE B 318      9.507  47.239  90.128  1.00 27.37           C
ATOM   5741  C    PHE B 318     10.355  45.988  90.029  1.00 28.59           C
ATOM   5742  O    PHE B 318     10.483  45.401  88.949  1.00 28.44           O
ATOM   5743  CB   PHE B 318      8.065  46.790  90.390  1.00 25.72           C
ATOM   5744  CG   PHE B 318      7.069  47.908  90.486  1.00 26.71           C
ATOM   5745  CD1  PHE B 318      7.404  49.121  91.078  1.00 26.62           C
ATOM   5746  CD2  PHE B 318      5.765  47.722  90.037  1.00 25.75           C
ATOM   5747  CE1  PHE B 318      6.452  50.130  91.222  1.00 27.07           C
ATOM   5748  CE2  PHE B 318      4.807  48.723  90.178  1.00 24.69           C
ATOM   5749  CZ   PHE B 318      5.150  49.928  90.771  1.00 26.56           C
ATOM   5750  N    ASN B 319     10.949  45.593  91.147  1.00 29.23           N
ATOM   5751  CA   ASN B 319     11.723  44.364  91.195  1.00 29.23           C
ATOM   5752  C    ASN B 319     10.665  43.418  91.733  1.00 29.02           C
ATOM   5753  O    ASN B 319     10.532  43.236  92.941  1.00 30.38           O
ATOM   5754  CB   ASN B 319     12.883  44.491  92.180  1.00 30.89           C
ATOM   5755  CG   ASN B 319     13.751  43.250  92.220  1.00 31.11           C
ATOM   5756  OD1  ASN B 319     14.923  43.312  92.602  1.00 34.04           O
ATOM   5757  ND2  ASN B 319     13.181  42.113  91.835  1.00 29.66           N
ATOM   5758  N    TRP B 320      9.902  42.836  90.820  1.00 28.34           N
ATOM   5759  CA   TRP B 320      8.802  41.954  91.173  1.00 30.17           C
ATOM   5760  C    TRP B 320      9.014  40.870  92.220  1.00 31.59           C
ATOM   5761  O    TRP B 320      8.322  40.862  93.236  1.00 30.11           O
ATOM   5762  CB   TRP B 320      8.200  41.348  89.898  1.00 28.71           C
ATOM   5763  CG   TRP B 320      7.484  42.390  89.109  1.00 28.26           C
ATOM   5764  CD1  TRP B 320      8.052  43.360  88.335  1.00 28.84           C
ATOM   5765  CD2  TRP B 320      6.083  42.679  89.147  1.00 27.97           C
ATOM   5766  NE1  TRP B 320      7.095  44.242  87.899  1.00 28.79           N
ATOM   5767  CE2  TRP B 320      5.876  43.848  88.383  1.00 29.00           C
ATOM   5768  CE3  TRP B 320      4.982  42.067  89.759  1.00 28.52           C
ATOM   5769  CZ2  TRP B 320      4.611  44.420  88.213  1.00 26.90           C
ATOM   5770  CZ3  TRP B 320      3.723  42.635  89.591  1.00 27.12           C
ATOM   5771  CH2  TRP B 320      3.551  43.803  88.822  1.00 28.76           C
ATOM   5772  N    LYS B 321      9.951  39.960  91.994  1.00 33.15           N
ATOM   5773  CA   LYS B 321     10.153  38.892  92.960  1.00 35.17           C
ATOM   5774  C    LYS B 321     10.702  39.375  94.293  1.00 36.74           C
ATOM   5775  O    LYS B 321     10.760  38.613  95.257  1.00 36.95           O
ATOM   5776  CB   LYS B 321     11.033  37.795  92.366  1.00 34.52           C
ATOM   5777  CG   LYS B 321     10.296  36.971  91.316  1.00 36.54           C
ATOM   5778  CD   LYS B 321     11.093  35.757  90.869  1.00 37.90           C
ATOM   5779  CE   LYS B 321     11.298  34.777  92.010  1.00 39.27           C
ATOM   5780  NZ   LYS B 321     10.008  34.279  92.561  1.00 41.02           N
ATOM   5781  N    LYS B 322     11.089  40.645  94.356  1.00 37.52           N
ATOM   5782  CA   LYS B 322     11.599  41.208  95.600  1.00 38.98           C
ATOM   5783  C    LYS B 322     10.424  41.672  96.464  1.00 39.04           C
ATOM   5784  O    LYS B 322     10.550  41.822  97.679  1.00 38.36           O
ATOM   5785  CB   LYS B 322     12.521  42.395  95.315  1.00 41.69           C
ATOM   5786  CG   LYS B 322     12.984  43.132  96.568  1.00 45.55           C
ATOM   5787  CD   LYS B 322     13.861  44.335  96.231  1.00 47.80           C
ATOM   5788  CE   LYS B 322     14.268  45.086  97.489  1.00 49.74           C
ATOM   5789  NZ   LYS B 322     15.213  46.197  97.190  1.00 51.78           N
ATOM   5790  N    HIS B 323      9.278  41.883  95.824  1.00 38.10           N
ATOM   5791  CA   HIS B 323      8.084  42.346  96.519  1.00 39.01           C
ATOM   5792  C    HIS B 323      6.989  41.299  96.664  1.00 37.72           C
ATOM   5793  O    HIS B 323      6.246  41.307  97.645  1.00 38.10           O
ATOM   5794  CB   HIS B 323      7.492  43.564  95.797  1.00 40.57           C
ATOM   5795  CG   HIS B 323      8.326  44.799  95.909  1.00 43.20           C
ATOM   5796  ND1  HIS B 323      8.531  45.452  97.106  1.00 44.54           N
ATOM   5797  CD2  HIS B 323      9.019  45.495  94.978  1.00 44.48           C
ATOM   5798  CE1  HIS B 323      9.315  46.497  96.907  1.00 45.91           C
ATOM   5799  NE2  HIS B 323      9.626  46.545  95.624  1.00 45.70           N
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| ATOM | 5800 | N   | LEU B 324 | 6.889  | 40.397 | 95.695 | 1.00 36.10 | N |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 5801 | CA  | LEU B 324 | 5.835  | 39.394 | 95.723 | 1.00 35.29 | C |
| ATOM | 5802 | C   | LEU B 324 | 6.324  | 37.974 | 95.511 | 1.00 35.94 | C |
| ATOM | 5803 | O   | LEU B 324 | 7.419  | 37.753 | 94.995 | 1.00 37.15 | O |
| ATOM | 5804 | CB  | LEU B 324 | 4.801  | 39.727 | 94.643 | 1.00 33.75 | C |
| ATOM | 5805 | CG  | LEU B 324 | 4.287  | 41.174 | 94.608 | 1.00 32.62 | C |
| ATOM | 5806 | CD1 | LEU B 324 | 3.479  | 41.406 | 93.338 | 1.00 29.65 | C |
| ATOM | 5807 | CD2 | LEU B 324 | 3.451  | 41.459 | 95.851 | 1.00 29.66 | C |
| ATOM | 5808 | N   | ASP B 325 | 5.505  | 37.012 | 95.923 | 1.00 36.11 | N |
| ATOM | 5809 | CA  | ASP B 325 | 5.831  | 35.607 | 95.725 | 1.00 36.48 | C |
| ATOM | 5810 | C   | ASP B 325 | 5.185  | 35.222 | 94.397 | 1.00 35.18 | C |
| ATOM | 5811 | O   | ASP B 325 | 4.355  | 35.966 | 93.872 | 1.00 35.68 | O |
| ATOM | 5812 | CB  | ASP B 325 | 5.288  | 34.733 | 96.872 | 1.00 38.06 | C |
| ATOM | 5813 | CG  | ASP B 325 | 3.814  | 34.966 | 97.153 | 1.00 39.12 | C |
| ATOM | 5814 | OD1 | ASP B 325 | 3.016  | 35.061 | 96.198 | 1.00 41.70 | O |
| ATOM | 5815 | OD2 | ASP B 325 | 3.448  | 35.040 | 98.343 | 1.00 42.89 | O |
| ATOM | 5816 | N   | ASP B 326 | 5.555  | 34.071 | 93.851 | 1.00 33.88 | N |
| ATOM | 5817 | CA  | ASP B 326 | 5.006  | 33.651 | 92.567 | 1.00 33.33 | C |
| ATOM | 5818 | C   | ASP B 326 | 3.488  | 33.540 | 92.546 | 1.00 32.87 | C |
| ATOM | 5819 | O   | ASP B 326 | 2.851  | 33.838 | 91.534 | 1.00 32.35 | O |
| ATOM | 5820 | CB  | ASP B 326 | 5.619  | 32.321 | 92.143 | 1.00 34.12 | C |
| ATOM | 5821 | CG  | ASP B 326 | 7.128  | 32.399 | 91.983 | 1.00 34.99 | C |
| ATOM | 5822 | OD1 | ASP B 326 | 7.647  | 33.473 | 91.598 | 1.00 33.00 | O |
| ATOM | 5823 | OD2 | ASP B 326 | 7.792  | 31.373 | 92.228 | 1.00 36.57 | O |
| ATOM | 5824 | N   | ALA B 327 | 2.914  | 33.113 | 93.666 | 1.00 31.21 | N |
| ATOM | 5825 | CA  | ALA B 327 | 1.472  | 32.952 | 93.778 | 1.00 29.52 | C |
| ATOM | 5826 | C   | ALA B 327 | 0.749  | 34.272 | 93.541 | 1.00 27.90 | C |
| ATOM | 5827 | O   | ALA B 327 | -0.215 | 34.333 | 92.787 | 1.00 25.59 | O |
| ATOM | 5828 | CB  | ALA B 327 | 1.120  | 32.398 | 95.160 | 1.00 31.11 | C |
| ATOM | 5829 | N   | THR B 328 | 1.226  | 35.323 | 94.196 | 1.00 27.96 | N |
| ATOM | 5830 | CA  | THR B 328 | 0.631  | 36.644 | 94.063 | 1.00 29.39 | C |
| ATOM | 5831 | C   | THR B 328 | 0.890  | 37.197 | 92.664 | 1.00 29.50 | C |
| ATOM | 5832 | O   | THR B 328 | -0.002 | 37.775 | 92.046 | 1.00 29.62 | O |
| ATOM | 5833 | CB  | THR B 328 | 1.202  | 37.601 | 95.117 | 1.00 30.35 | C |
| ATOM | 5834 | OG1 | THR B 328 | 1.020  | 37.025 | 96.414 | 1.00 30.34 | O |
| ATOM | 5835 | CG2 | THR B 328 | 0.492  | 38.948 | 95.067 | 1.00 31.93 | C |
| ATOM | 5836 | N   | ILE B 329 | 2.111  | 37.013 | 92.171 | 1.00 28.49 | N |
| ATOM | 5837 | CA  | ILE B 329 | 2.480  | 37.468 | 90.836 | 1.00 27.22 | C |
| ATOM | 5838 | C   | ILE B 329 | 1.517  | 36.881 | 89.798 | 1.00 28.21 | C |
| ATOM | 5839 | O   | ILE B 329 | 1.014  | 37.587 | 88.918 | 1.00 27.78 | O |
| ATOM | 5840 | CB  | ILE B 329 | 3.929  | 37.028 | 90.488 | 1.00 27.00 | C |
| ATOM | 5841 | CG1 | ILE B 329 | 4.927  | 37.866 | 91.286 | 1.00 27.51 | C |
| ATOM | 5842 | CG2 | ILE B 329 | 4.186  | 37.158 | 88.998 | 1.00 25.24 | C |
| ATOM | 5843 | CD1 | ILE B 329 | 6.368  | 37.431 | 91.104 | 1.00 28.75 | C |
| ATOM | 5844 | N   | ALA B 330 | 1.262  | 35.582 | 89.917 | 1.00 27.56 | N |
| ATOM | 5845 | CA  | ALA B 330 | 0.379  | 34.870 | 89.004 | 1.00 27.20 | C |
| ATOM | 5846 | C   | ALA B 330 | -1.061 | 35.380 | 89.002 | 1.00 27.07 | C |
| ATOM | 5847 | O   | ALA B 330 | -1.734 | 35.337 | 87.970 | 1.00 27.91 | O |
| ATOM | 5848 | CB  | ALA B 330 | 0.396  | 33.376 | 89.336 | 1.00 26.99 | C |
| ATOM | 5849 | N   | LYS B 331 | -1.533 | 35.862 | 90.147 | 1.00 26.70 | N |
| ATOM | 5850 | CA  | LYS B 331 | -2.907 | 36.354 | 90.250 | 1.00 27.43 | C |
| ATOM | 5851 | C   | LYS B 331 | -3.011 | 37.875 | 90.218 | 1.00 25.60 | C |
| ATOM | 5852 | O   | LYS B 331 | -4.114 | 38.425 | 90.205 | 1.00 24.58 | O |
| ATOM | 5853 | CB  | LYS B 331 | -3.543 | 35.862 | 91.549 | 1.00 28.48 | C |
| ATOM | 5854 | CG  | LYS B 331 | -3.040 | 36.595 | 92.791 | 1.00 29.38 | C |
| ATOM | 5855 | CD  | LYS B 331 | -3.737 | 36.097 | 94.044 | 1.00 31.73 | C |
| ATOM | 5856 | CE  | LYS B 331 | -3.285 | 36.849 | 95.288 | 1.00 30.98 | C |
| ATOM | 5857 | NZ  | LYS B 331 | -3.937 | 36.326 | 96.525 | 1.00 29.13 | N |
| ATOM | 5858 | N   | PHE B 332 | -1.864 | 38.546 | 90.200 | 1.00 25.03 | N |
| ATOM | 5859 | CA  | PHE B 332 | -1.826 | 40.004 | 90.222 | 1.00 25.90 | C |
| ATOM | 5860 | C   | PHE B 332 | -2.851 | 40.700 | 89.327 | 1.00 26.42 | C |
| ATOM | 5861 | O   | PHE B 332 | -3.737 | 41.398 | 89.830 | 1.00 26.92 | O |
| ATOM | 5862 | CB  | PHE B 332 | -0.423 | 40.506 | 89.876 | 1.00 26.44 | C |
| ATOM | 5863 | CG  | PHE B 332 | -0.167 | 41.917 | 90.317 | 1.00 27.99 | C |
| ATOM | 5864 | CD1 | PHE B 332 | -0.033 | 42.219 | 91.668 | 1.00 27.10 | C |
| ATOM | 5865 | CD2 | PHE B 332 | -0.078 | 42.951 | 89.387 | 1.00 27.77 | C |
| ATOM | 5866 | CE1 | PHE B 332 | 0.186  | 43.531 | 92.087 | 1.00 28.10 | C |
| ATOM | 5867 | CE2 | PHE B 332 | 0.142  | 44.265 | 89.800 | 1.00 27.52 | C |
| ATOM | 5868 | CZ  | PHE B 332 | 0.273  | 44.552 | 91.153 | 1.00 27.33 | C |
| ATOM | 5869 | N   | GLN B 333 | -2.748 | 40.514 | 88.012 | 1.00 25.68 | N |
| ATOM | 5870 | CA  | GLN B 333 | -3.686 | 41.171 | 87.097 | 1.00 25.63 | C |
| ATOM | 5871 | C   | GLN B 333 | -5.151 | 40.783 | 87.319 | 1.00 26.31 | C |
| ATOM | 5872 | O   | GLN B 333 | -6.039 | 41.643 | 87.289 | 1.00 24.97 | O |
| ATOM | 5873 | CB  | GLN B 333 | -3.307 | 40.907 | 85.635 | 1.00 22.25 | C |
| ATOM | 5874 | CG  | GLN B 333 | -1.942 | 41.449 | 85.218 | 1.00 22.36 | C |
| ATOM | 5875 | CD  | GLN B 333 | -1.917 | 41.933 | 83.772 | 1.00 22.42 | C |
| ATOM | 5876 | OE1 | GLN B 333 | -2.572 | 41.360 | 82.902 | 1.00 23.22 | O |
| ATOM | 5877 | NE2 | GLN B 333 | -1.148 | 42.987 | 83.512 | 1.00 20.96 | N |
| ATOM | 5878 | N   | LYS B 334 | -5.407 | 39.497 | 87.543 | 1.00 27.47 | N |
| ATOM | 5879 | CA  | LYS B 334 | -6.776 | 39.042 | 87.757 | 1.00 29.07 | C |

| ATOM | 5880 | C | LYS | B | 334 | -7.410 | 39.746 | 88.957 | 1.00 | 28.82 | C |
|------|------|------|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5881 | O | LYS | B | 334 | -8.585 | 40.118 | 88.915 | 1.00 | 28.62 | O |
| ATOM | 5882 | CB | LYS | B | 334 | -6.817 | 37.523 | 87.952 | 1.00 | 30.76 | C |
| ATOM | 5883 | CG | LYS | B | 334 | -8.235 | 36.969 | 88.027 | 1.00 | 34.67 | C |
| ATOM | 5884 | CD | LYS | B | 334 | -8.258 | 35.447 | 88.071 | 1.00 | 38.24 | C |
| ATOM | 5885 | CE | LYS | B | 334 | -9.675 | 34.932 | 88.293 | 1.00 | 38.92 | C |
| ATOM | 5886 | NZ | LYS | B | 334 | -10.605 | 35.475 | 87.262 | 1.00 | 40.37 | N |
| ATOM | 5887 | N | GLU | B | 335 | -6.632 | 39.928 | 90.021 | 1.00 | 28.29 | N |
| ATOM | 5888 | CA | GLU | B | 335 | -7.117 | 40.608 | 91.221 | 1.00 | 28.56 | C |
| ATOM | 5889 | C | GLU | B | 335 | -7.391 | 42.090 | 90.938 | 1.00 | 28.27 | C |
| ATOM | 5890 | O | GLU | B | 335 | -8.390 | 42.647 | 91.393 | 1.00 | 28.78 | O |
| ATOM | 5891 | CB | GLU | B | 335 | -6.095 | 40.480 | 92.355 | 1.00 | 29.78 | C |
| ATOM | 5892 | CG | GLU | B | 335 | -5.994 | 39.082 | 92.934 | 1.00 | 33.33 | C |
| ATOM | 5893 | CD | GLU | B | 335 | -7.298 | 38.633 | 93.573 | 1.00 | 36.40 | C |
| ATOM | 5894 | OE1 | GLU | B | 335 | -7.698 | 39.222 | 94.603 | 1.00 | 38.31 | O |
| ATOM | 5895 | OE2 | GLU | B | 335 | -7.930 | 37.697 | 93.041 | 1.00 | 35.82 | O |
| ATOM | 5896 | N | LEU | B | 336 | -6.497 | 42.729 | 90.189 | 1.00 | 27.32 | N |
| ATOM | 5897 | CA | LEU | B | 336 | -6.670 | 44.133 | 89.852 | 1.00 | 26.29 | C |
| ATOM | 5898 | C | LEU | B | 336 | -7.962 | 44.305 | 89.065 | 1.00 | 25.76 | C |
| ATOM | 5899 | O | LEU | B | 336 | -8.719 | 45.249 | 89.292 | 1.00 | 26.52 | O |
| ATOM | 5900 | CB | LEU | B | 336 | -5.480 | 44.635 | 89.028 | 1.00 | 25.05 | C |
| ATOM | 5901 | CG | LEU | B | 336 | -4.200 | 44.896 | 89.821 | 1.00 | 24.42 | C |
| ATOM | 5902 | CD1 | LEU | B | 336 | -3.069 | 45.274 | 88.879 | 1.00 | 23.12 | C |
| ATOM | 5903 | CD2 | LEU | B | 336 | -4.453 | 46.008 | 90.821 | 1.00 | 24.88 | C |
| ATOM | 5904 | N | ALA | B | 337 | -8.213 | 43.379 | 88.146 | 1.00 | 25.18 | N |
| ATOM | 5905 | CA | ALA | B | 337 | -9.420 | 43.433 | 87.328 | 1.00 | 26.79 | C |
| ATOM | 5906 | C | ALA | B | 337 | -10.634 | 43.339 | 88.238 | 1.00 | 26.74 | C |
| ATOM | 5907 | O | ALA | B | 337 | -11.625 | 44.038 | 88.043 | 1.00 | 25.29 | O |
| ATOM | 5908 | CB | ALA | B | 337 | -9.431 | 42.288 | 86.323 | 1.00 | 23.44 | C |
| ATOM | 5909 | N | ALA | B | 338 | -10.539 | 42.476 | 89.243 | 1.00 | 27.78 | N |
| ATOM | 5910 | CA | ALA | B | 338 | -11.633 | 42.293 | 90.180 | 1.00 | 28.64 | C |
| ATOM | 5911 | C | ALA | B | 338 | -11.900 | 43.559 | 90.981 | 1.00 | 29.22 | C |
| ATOM | 5912 | O | ALA | B | 338 | -12.972 | 43.703 | 91.567 | 1.00 | 29.88 | O |
| ATOM | 5913 | CB | ALA | B | 338 | -11.330 | 41.134 | 91.119 | 1.00 | 28.82 | C |
| ATOM | 5914 | N | MET | B | 339 | -10.936 | 44.479 | 91.006 | 1.00 | 29.56 | N |
| ATOM | 5915 | CA | MET | B | 339 | -11.109 | 45.722 | 91.752 | 1.00 | 28.30 | C |
| ATOM | 5916 | C | MET | B | 339 | -11.334 | 46.957 | 90.868 | 1.00 | 28.66 | C |
| ATOM | 5917 | O | MET | B | 339 | -11.126 | 48.088 | 91.305 | 1.00 | 29.43 | O |
| ATOM | 5918 | CB | MET | B | 339 | -9.918 | 45.932 | 92.707 | 1.00 | 29.09 | C |
| ATOM | 5919 | CG | MET | B | 339 | -9.760 | 44.789 | 93.729 | 1.00 | 27.90 | C |
| ATOM | 5920 | SD | MET | B | 339 | -8.442 | 44.944 | 94.980 | 1.00 | 26.39 | S |
| ATOM | 5921 | CE | MET | B | 339 | -6.963 | 44.893 | 93.943 | 1.00 | 26.40 | C |
| ATOM | 5922 | N | GLY | B | 340 | -11.756 | 46.745 | 89.624 | 1.00 | 27.15 | N |
| ATOM | 5923 | CA | GLY | B | 340 | -12.031 | 47.875 | 88.746 | 1.00 | 27.48 | C |
| ATOM | 5924 | C | GLY | B | 340 | -10.932 | 48.380 | 87.822 | 1.00 | 26.74 | C |
| ATOM | 5925 | O | GLY | B | 340 | -11.151 | 49.320 | 87.063 | 1.00 | 25.19 | O |
| ATOM | 5926 | N | PHE | B | 341 | -9.751 | 47.775 | 87.883 | 1.00 | 26.76 | N |
| ATOM | 5927 | CA | PHE | B | 341 | -8.641 | 48.181 | 87.020 | 1.00 | 26.45 | C |
| ATOM | 5928 | C | PHE | B | 341 | -8.807 | 47.449 | 85.692 | 1.00 | 25.69 | C |
| ATOM | 5929 | O | PHE | B | 341 | -8.268 | 46.359 | 85.501 | 1.00 | 26.29 | O |
| ATOM | 5930 | CB | PHE | B | 341 | -7.312 | 47.814 | 87.681 | 1.00 | 26.04 | C |
| ATOM | 5931 | CG | PHE | B | 341 | -7.028 | 48.593 | 88.931 | 1.00 | 27.04 | C |
| ATOM | 5932 | CD1 | PHE | B | 341 | -6.533 | 49.894 | 88.859 | 1.00 | 27.43 | C |
| ATOM | 5933 | CD2 | PHE | B | 341 | -7.282 | 48.041 | 90.185 | 1.00 | 28.72 | C |
| ATOM | 5934 | CE1 | PHE | B | 341 | -6.292 | 50.636 | 90.014 | 1.00 | 28.02 | C |
| ATOM | 5935 | CE2 | PHE | B | 341 | -7.046 | 48.776 | 91.354 | 1.00 | 27.81 | C |
| ATOM | 5936 | CZ | PHE | B | 341 | -6.550 | 50.076 | 91.267 | 1.00 | 28.03 | C |
| ATOM | 5937 | N | LYS | B | 342 | -9.554 | 48.062 | 84.780 | 1.00 | 25.45 | N |
| ATOM | 5938 | CA | LYS | B | 342 | -9.848 | 47.460 | 83.484 | 1.00 | 26.33 | C |
| ATOM | 5939 | C | LYS | B | 342 | -8.792 | 47.592 | 82.391 | 1.00 | 24.88 | C |
| ATOM | 5940 | O | LYS | B | 342 | -8.885 | 46.925 | 81.363 | 1.00 | 23.48 | O |
| ATOM | 5941 | CB | LYS | B | 342 | -11.196 | 47.979 | 82.975 | 1.00 | 28.84 | C |
| ATOM | 5942 | CG | LYS | B | 342 | -12.359 | 47.629 | 83.892 | 1.00 | 29.38 | C |
| ATOM | 5943 | CD | LYS | B | 342 | -12.423 | 46.130 | 84.130 | 1.00 | 31.96 | C |
| ATOM | 5944 | CE | LYS | B | 342 | -13.564 | 45.752 | 85.060 | 1.00 | 33.32 | C |
| ATOM | 5945 | NZ | LYS | B | 342 | -13.507 | 44.305 | 85.412 | 1.00 | 35.68 | N |
| ATOM | 5946 | N | PHE | B | 343 | -7.803 | 48.457 | 82.587 | 1.00 | 22.90 | N |
| ATOM | 5947 | CA | PHE | B | 343 | -6.736 | 48.575 | 81.599 | 1.00 | 21.37 | C |
| ATOM | 5948 | C | PHE | B | 343 | -5.405 | 48.423 | 82.312 | 1.00 | 21.26 | C |
| ATOM | 5949 | O | PHE | B | 343 | -5.010 | 49.278 | 83.101 | 1.00 | 20.49 | O |
| ATOM | 5950 | CB | PHE | B | 343 | -6.761 | 49.914 | 80.852 | 1.00 | 18.71 | C |
| ATOM | 5951 | CG | PHE | B | 343 | -5.770 | 49.973 | 79.720 | 1.00 | 18.91 | C |
| ATOM | 5952 | CD1 | PHE | B | 343 | -5.897 | 49.118 | 78.626 | 1.00 | 18.11 | C |
| ATOM | 5953 | CD2 | PHE | B | 343 | -4.671 | 50.826 | 79.774 | 1.00 | 19.77 | C |
| ATOM | 5954 | CE1 | PHE | B | 343 | -4.946 | 49.105 | 77.607 | 1.00 | 17.89 | C |
| ATOM | 5955 | CE2 | PHE | B | 343 | -3.714 | 50.822 | 78.758 | 1.00 | 18.70 | C |
| ATOM | 5956 | CZ | PHE | B | 343 | -3.853 | 49.958 | 77.674 | 1.00 | 18.81 | C |
| ATOM | 5957 | N | GLN | B | 344 | -4.719 | 47.322 | 82.033 | 1.00 | 20.73 | N |
| ATOM | 5958 | CA | GLN | B | 344 | -3.440 | 47.042 | 82.664 | 1.00 | 20.63 | C |
| ATOM | 5959 | C | GLN | B | 344 | -2.367 | 46.886 | 81.596 | 1.00 | 18.72 | C |

| ATOM | 5960 | O | GLN | B | 344 | -2.602 | 46.295 | 80.545 | 1.00 | 18.09 | O |
|------|------|------|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 5961 | CB | GLN | B | 344 | -3.568 | 45.780 | 83.517 | 1.00 | 21.46 | C |
| ATOM | 5962 | CG | GLN | B | 344 | -4.795 | 45.833 | 84.426 | 1.00 | 23.46 | C |
| ATOM | 5963 | CD | GLN | B | 344 | -4.922 | 44.624 | 85.331 | 1.00 | 24.28 | C |
| ATOM | 5964 | OE1 | GLN | B | 344 | -5.997 | 44.350 | 85.865 | 1.00 | 26.60 | O |
| ATOM | 5965 | NE2 | GLN | B | 344 | -3.825 | 43.902 | 85.516 | 1.00 | 23.17 | N |
| ATOM | 5966 | N | PHE | B | 345 | -1.180 | 47.402 | 81.876 | 1.00 | 16.96 | N |
| ATOM | 5967 | CA | PHE | B | 345 | -0.115 | 47.358 | 80.891 | 1.00 | 17.02 | C |
| ATOM | 5968 | C | PHE | B | 345 | 1.284 | 47.325 | 81.478 | 1.00 | 16.11 | C |
| ATOM | 5969 | O | PHE | B | 345 | 1.526 | 47.863 | 82.552 | 1.00 | 16.09 | O |
| ATOM | 5970 | CB | PHE | B | 345 | -0.238 | 48.586 | 79.988 | 1.00 | 16.10 | C |
| ATOM | 5971 | CG | PHE | B | 345 | -0.367 | 49.876 | 80.748 | 1.00 | 16.63 | C |
| ATOM | 5972 | CD1 | PHE | B | 345 | -1.564 | 50.211 | 81.376 | 1.00 | 15.78 | C |
| ATOM | 5973 | CD2 | PHE | B | 345 | 0.721 | 50.734 | 80.878 | 1.00 | 17.27 | C |
| ATOM | 5974 | CE1 | PHE | B | 345 | -1.680 | 51.372 | 82.123 | 1.00 | 17.46 | C |
| ATOM | 5975 | CE2 | PHE | B | 345 | 0.620 | 51.905 | 81.626 | 1.00 | 18.01 | C |
| ATOM | 5976 | CZ | PHE | B | 345 | -0.588 | 52.226 | 82.254 | 1.00 | 18.13 | C |
| ATOM | 5977 | N | ILE | B | 346 | 2.203 | 46.682 | 80.765 | 1.00 | 15.81 | N |
| ATOM | 5978 | CA | ILE | B | 346 | 3.595 | 46.641 | 81.192 | 1.00 | 15.89 | C |
| ATOM | 5979 | C | ILE | B | 346 | 4.307 | 47.661 | 80.296 | 1.00 | 16.78 | C |
| ATOM | 5980 | O | ILE | B | 346 | 4.664 | 47.368 | 79.160 | 1.00 | 17.12 | O |
| ATOM | 5981 | CB | ILE | B | 346 | 4.213 | 45.250 | 80.993 | 1.00 | 16.55 | C |
| ATOM | 5982 | CG1 | ILE | B | 346 | 3.462 | 44.216 | 81.843 | 1.00 | 15.08 | C |
| ATOM | 5983 | CG2 | ILE | B | 346 | 5.694 | 45.282 | 81.385 | 1.00 | 16.17 | C |
| ATOM | 5984 | CD1 | ILE | B | 346 | 4.014 | 42.810 | 81.726 | 1.00 | 15.32 | C |
| ATOM | 5985 | N | THR | B | 347 | 4.480 | 48.868 | 80.821 | 1.00 | 17.03 | N |
| ATOM | 5986 | CA | THR | B | 347 | 5.099 | 49.979 | 80.101 | 1.00 | 17.67 | C |
| ATOM | 5987 | C | THR | B | 347 | 6.364 | 49.696 | 79.290 | 1.00 | 16.91 | C |
| ATOM | 5988 | O | THR | B | 347 | 6.405 | 49.950 | 78.091 | 1.00 | 15.99 | O |
| ATOM | 5989 | CB | THR | B | 347 | 5.425 | 51.142 | 81.073 | 1.00 | 17.00 | C |
| ATOM | 5990 | OG1 | THR | B | 347 | 6.157 | 50.628 | 82.192 | 1.00 | 17.87 | O |
| ATOM | 5991 | CG2 | THR | B | 347 | 4.152 | 51.807 | 81.572 | 1.00 | 16.00 | C |
| ATOM | 5992 | N | LEU | B | 348 | 7.386 | 49.155 | 79.941 | 1.00 | 16.86 | N |
| ATOM | 5993 | CA | LEU | B | 348 | 8.656 | 48.917 | 79.280 | 1.00 | 17.60 | C |
| ATOM | 5994 | C | LEU | B | 348 | 8.922 | 47.508 | 78.771 | 1.00 | 18.36 | C |
| ATOM | 5995 | O | LEU | B | 348 | 10.079 | 47.116 | 78.609 | 1.00 | 16.65 | O |
| ATOM | 5996 | CB | LEU | B | 348 | 9.780 | 49.347 | 80.222 | 1.00 | 18.85 | C |
| ATOM | 5997 | CG | LEU | B | 348 | 9.486 | 50.663 | 80.956 | 1.00 | 21.12 | C |
| ATOM | 5998 | CD1 | LEU | B | 348 | 10.716 | 51.110 | 81.754 | 1.00 | 22.19 | C |
| ATOM | 5999 | CD2 | LEU | B | 348 | 9.080 | 51.728 | 79.938 | 1.00 | 20.89 | C |
| ATOM | 6000 | N | ALA | B | 349 | 7.863 | 46.751 | 78.502 | 1.00 | 16.99 | N |
| ATOM | 6001 | CA | ALA | B | 349 | 8.027 | 45.381 | 78.011 | 1.00 | 19.03 | C |
| ATOM | 6002 | C | ALA | B | 349 | 8.912 | 45.325 | 76.765 | 1.00 | 17.08 | C |
| ATOM | 6003 | O | ALA | B | 349 | 9.796 | 44.480 | 76.662 | 1.00 | 17.45 | O |
| ATOM | 6004 | CB | ALA | B | 349 | 6.655 | 44.760 | 77.704 | 1.00 | 19.36 | C |
| ATOM | 6005 | N | GLY | B | 350 | 8.664 | 46.231 | 75.824 | 1.00 | 16.61 | N |
| ATOM | 6006 | CA | GLY | B | 350 | 9.431 | 46.262 | 74.589 | 1.00 | 14.56 | C |
| ATOM | 6007 | C | GLY | B | 350 | 10.900 | 46.572 | 74.804 | 1.00 | 15.39 | C |
| ATOM | 6008 | O | GLY | B | 350 | 11.760 | 45.853 | 74.296 | 1.00 | 15.24 | O |
| ATOM | 6009 | N | PHE | B | 351 | 11.191 | 47.640 | 75.543 | 1.00 | 14.15 | N |
| ATOM | 6010 | CA | PHE | B | 351 | 12.575 | 48.016 | 75.830 | 1.00 | 16.46 | C |
| ATOM | 6011 | C | PHE | B | 351 | 13.340 | 46.812 | 76.383 | 1.00 | 17.45 | C |
| ATOM | 6012 | O | PHE | B | 351 | 14.459 | 46.518 | 75.951 | 1.00 | 16.85 | O |
| ATOM | 6013 | CB | PHE | B | 351 | 12.633 | 49.146 | 76.863 | 1.00 | 15.38 | C |
| ATOM | 6014 | CG | PHE | B | 351 | 14.028 | 49.423 | 77.382 | 1.00 | 16.41 | C |
| ATOM | 6015 | CD1 | PHE | B | 351 | 14.852 | 50.355 | 76.754 | 1.00 | 14.33 | C |
| ATOM | 6016 | CD2 | PHE | B | 351 | 14.526 | 48.726 | 78.489 | 1.00 | 17.26 | C |
| ATOM | 6017 | CE1 | PHE | B | 351 | 16.151 | 50.589 | 77.220 | 1.00 | 14.26 | C |
| ATOM | 6018 | CE2 | PHE | B | 351 | 15.827 | 48.951 | 78.963 | 1.00 | 14.95 | C |
| ATOM | 6019 | CZ | PHE | B | 351 | 16.639 | 49.885 | 78.326 | 1.00 | 14.49 | C |
| ATOM | 6020 | N | HIS | B | 352 | 12.733 | 46.122 | 77.344 | 1.00 | 15.99 | N |
| ATOM | 6021 | CA | HIS | B | 352 | 13.376 | 44.964 | 77.949 | 1.00 | 18.66 | C |
| ATOM | 6022 | C | HIS | B | 352 | 13.492 | 43.744 | 77.047 | 1.00 | 18.27 | C |
| ATOM | 6023 | O | HIS | B | 352 | 14.531 | 43.083 | 77.042 | 1.00 | 19.76 | O |
| ATOM | 6024 | CB | HIS | B | 352 | 12.669 | 44.595 | 79.251 | 1.00 | 16.77 | C |
| ATOM | 6025 | CG | HIS | B | 352 | 12.975 | 45.539 | 80.368 | 1.00 | 18.14 | C |
| ATOM | 6026 | ND1 | HIS | B | 352 | 14.216 | 45.599 | 80.967 | 1.00 | 17.31 | N |
| ATOM | 6027 | CD2 | HIS | B | 352 | 12.233 | 46.519 | 80.939 | 1.00 | 16.96 | C |
| ATOM | 6028 | CE1 | HIS | B | 352 | 14.226 | 46.577 | 81.856 | 1.00 | 19.39 | C |
| ATOM | 6029 | NE2 | HIS | B | 352 | 13.036 | 47.151 | 81.858 | 1.00 | 17.43 | N |
| ATOM | 6030 | N | ALA | B | 353 | 12.445 | 43.449 | 76.283 | 1.00 | 17.52 | N |
| ATOM | 6031 | CA | ALA | B | 353 | 12.467 | 42.298 | 75.389 | 1.00 | 15.53 | C |
| ATOM | 6032 | C | ALA | B | 353 | 13.505 | 42.517 | 74.290 | 1.00 | 17.31 | C |
| ATOM | 6033 | O | ALA | B | 353 | 14.215 | 41.584 | 73.895 | 1.00 | 17.25 | O |
| ATOM | 6034 | CB | ALA | B | 353 | 11.090 | 42.089 | 74.775 | 1.00 | 15.61 | C |
| ATOM | 6035 | N | LEU | B | 354 | 13.587 | 43.759 | 73.811 | 1.00 | 15.53 | N |
| ATOM | 6036 | CA | LEU | B | 354 | 14.519 | 44.132 | 72.754 | 1.00 | 16.32 | C |
| ATOM | 6037 | C | LEU | B | 354 | 15.969 | 44.139 | 73.228 | 1.00 | 16.03 | C |
| ATOM | 6038 | O | LEU | B | 354 | 16.841 | 43.574 | 72.574 | 1.00 | 15.47 | O |
| ATOM | 6039 | CB | LEU | B | 354 | 14.152 | 45.515 | 72.184 | 1.00 | 14.28 | C |

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ATOM   6040  CG   LEU B 354      15.023  46.042  71.035  1.00 14.82          C
ATOM   6041  CD1  LEU B 354      14.235  47.051  70.221  1.00 10.47          C
ATOM   6042  CD2  LEU B 354      16.311  46.662  71.586  1.00 12.88          C
ATOM   6043  N    ASN B 355      16.230  44.784  74.360  1.00 16.57          N
ATOM   6044  CA   ASN B 355      17.589  44.842  74.883  1.00 18.05          C
ATOM   6045  C    ASN B 355      18.097  43.471  75.350  1.00 17.75          C
ATOM   6046  O    ASN B 355      19.233  43.098  75.064  1.00 17.36          O
ATOM   6047  CB   ASN B 355      17.674  45.872  76.019  1.00 16.95          C
ATOM   6048  CG   ASN B 355      17.753  47.308  75.500  1.00 19.03          C
ATOM   6049  OD1  ASN B 355      18.832  47.800  75.163  1.00 19.41          O
ATOM   6050  ND2  ASN B 355      16.608  47.976  75.418  1.00 13.71          N
ATOM   6051  N    TYR B 356      17.259  42.707  76.041  1.00 17.21          N
ATOM   6052  CA   TYR B 356      17.692  41.396  76.513  1.00 17.94          C
ATOM   6053  C    TYR B 356      17.972  40.413  75.381  1.00 19.66          C
ATOM   6054  O    TYR B 356      19.056  39.830  75.299  1.00 20.06          O
ATOM   6055  CB   TYR B 356      16.658  40.769  77.448  1.00 18.52          C
ATOM   6056  CG   TYR B 356      17.099  39.396  77.892  1.00 22.60          C
ATOM   6057  CD1  TYR B 356      18.172  39.244  78.770  1.00 22.00          C
ATOM   6058  CD2  TYR B 356      16.541  38.248  77.331  1.00 22.89          C
ATOM   6059  CE1  TYR B 356      18.688  37.992  79.070  1.00 23.48          C
ATOM   6060  CE2  TYR B 356      17.053  36.985  77.625  1.00 25.83          C
ATOM   6061  CZ   TYR B 356      18.130  36.868  78.496  1.00 22.96          C
ATOM   6062  OH   TYR B 356      18.649  35.629  78.788  1.00 24.89          O
ATOM   6063  N    SER B 357      16.987  40.232  74.508  1.00 19.44          N
ATOM   6064  CA   SER B 357      17.113  39.306  73.394  1.00 18.17          C
ATOM   6065  C    SER B 357      18.325  39.601  72.516  1.00 20.02          C
ATOM   6066  O    SER B 357      18.963  38.677  72.009  1.00 18.90          O
ATOM   6067  CB   SER B 357      15.834  39.330  72.548  1.00 18.80          C
ATOM   6068  OG   SER B 357      15.649  40.592  71.939  1.00 19.01          O
ATOM   6069  N    MET B 358      18.643  40.879  72.316  1.00 19.67          N
ATOM   6070  CA   MET B 358      19.801  41.210  71.495  1.00 19.27          C
ATOM   6071  C    MET B 358      21.089  41.024  72.289  1.00 20.11          C
ATOM   6072  O    MET B 358      22.115  40.655  71.724  1.00 20.70          O
ATOM   6073  CB   MET B 358      19.730  42.644  70.967  1.00 19.60          C
ATOM   6074  CG   MET B 358      20.880  42.981  70.022  1.00 16.38          C
ATOM   6075  SD   MET B 358      21.115  41.733  68.720  1.00 21.15          S
ATOM   6076  CE   MET B 358      19.587  41.922  67.775  1.00 16.47          C
ATOM   6077  N    PHE B 359      21.050  41.286  73.593  1.00 20.53          N
ATOM   6078  CA   PHE B 359      22.255  41.089  74.389  1.00 21.91          C
ATOM   6079  C    PHE B 359      22.560  39.602  74.368  1.00 23.13          C
ATOM   6080  O    PHE B 359      23.692  39.182  74.087  1.00 23.99          O
ATOM   6081  CB   PHE B 359      22.080  41.511  75.851  1.00 19.89          C
ATOM   6082  CG   PHE B 359      23.288  41.206  76.695  1.00 20.48          C
ATOM   6083  CD1  PHE B 359      24.417  42.017  76.641  1.00 21.15          C
ATOM   6084  CD2  PHE B 359      23.345  40.042  77.450  1.00 21.45          C
ATOM   6085  CE1  PHE B 359      25.588  41.665  77.322  1.00 19.91          C
ATOM   6086  CE2  PHE B 359      24.512  39.684  78.133  1.00 21.68          C
ATOM   6087  CZ   PHE B 359      25.632  40.498  78.065  1.00 20.58          C
ATOM   6088  N    ASP B 360      21.532  38.814  74.664  1.00 22.65          N
ATOM   6089  CA   ASP B 360      21.657  37.366  74.703  1.00 24.10          C
ATOM   6090  C    ASP B 360      22.189  36.786  73.396  1.00 24.31          C
ATOM   6091  O    ASP B 360      23.085  35.937  73.409  1.00 25.08          O
ATOM   6092  CB   ASP B 360      20.307  36.731  75.033  1.00 24.54          C
ATOM   6093  CG   ASP B 360      20.412  35.232  75.269  1.00 27.14          C
ATOM   6094  OD1  ASP B 360      21.134  34.818  76.201  1.00 26.41          O
ATOM   6095  OD2  ASP B 360      19.770  34.467  74.522  1.00 29.60          O
ATOM   6096  N    LEU B 361      21.643  37.244  72.272  1.00 22.84          N
ATOM   6097  CA   LEU B 361      22.078  36.756  70.969  1.00 20.64          C
ATOM   6098  C    LEU B 361      23.504  37.175  70.670  1.00 20.29          C
ATOM   6099  O    LEU B 361      24.331  36.353  70.290  1.00 21.85          O
ATOM   6100  CB   LEU B 361      21.162  37.279  69.860  1.00 20.67          C
ATOM   6101  CG   LEU B 361      21.539  36.870  68.431  1.00 20.11          C
ATOM   6102  CD1  LEU B 361      21.478  35.351  68.305  1.00 18.82          C
ATOM   6103  CD2  LEU B 361      20.592  37.529  67.431  1.00 20.51          C
ATOM   6104  N    ALA B 362      23.786  38.461  70.843  1.00 20.62          N
ATOM   6105  CA   ALA B 362      25.113  38.995  70.574  1.00 20.82          C
ATOM   6106  C    ALA B 362      26.169  38.303  71.422  1.00 21.97          C
ATOM   6107  O    ALA B 362      27.250  37.972  70.937  1.00 21.95          O
ATOM   6108  CB   ALA B 362      25.132  40.496  70.831  1.00 19.26          C
ATOM   6109  N    TYR B 363      25.854  38.081  72.691  1.00 23.62          N
ATOM   6110  CA   TYR B 363      26.798  37.429  73.591  1.00 23.83          C
ATOM   6111  C    TYR B 363      27.132  36.042  73.060  1.00 23.10          C
ATOM   6112  O    TYR B 363      28.298  35.698  72.884  1.00 23.97          O
ATOM   6113  CB   TYR B 363      26.206  37.299  74.996  1.00 24.70          C
ATOM   6114  CG   TYR B 363      27.188  36.761  76.012  1.00 27.12          C
ATOM   6115  CD1  TYR B 363      28.105  37.606  76.639  1.00 26.05          C
ATOM   6116  CD2  TYR B 363      27.215  35.405  76.329  1.00 25.96          C
ATOM   6117  CE1  TYR B 363      29.020  37.113  77.557  1.00 27.55          C
ATOM   6118  CE2  TYR B 363      28.127  34.903  77.243  1.00 27.73          C
ATOM   6119  CZ   TYR B 363      29.025  35.761  77.856  1.00 29.21          C
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| ATOM | 6120 | OH | TYR B 363 | 29.912 | 35.267 | 78.789 | 1.00 | 31.20 | O |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 6121 | N | GLY B 364 | 26.099 | 35.253 | 72.799 | 1.00 | 21.75 | N |
| ATOM | 6122 | CA | GLY B 364 | 26.307 | 33.910 | 72.298 | 1.00 | 21.96 | C |
| ATOM | 6123 | C | GLY B 364 | 27.028 | 33.896 | 70.968 | 1.00 | 23.52 | C |
| ATOM | 6124 | O | GLY B 364 | 27.827 | 33.003 | 70.690 | 1.00 | 23.32 | O |
| ATOM | 6125 | N | TYR B 365 | 26.729 | 34.894 | 70.145 | 1.00 | 23.76 | N |
| ATOM | 6126 | CA | TYR B 365 | 27.321 | 35.040 | 68.826 | 1.00 | 24.01 | C |
| ATOM | 6127 | C | TYR B 365 | 28.812 | 35.342 | 68.959 | 1.00 | 24.93 | C |
| ATOM | 6128 | O | TYR B 365 | 29.632 | 34.864 | 68.171 | 1.00 | 24.60 | O |
| ATOM | 6129 | CB | TYR B 365 | 26.606 | 36.179 | 68.089 | 1.00 | 24.78 | C |
| ATOM | 6130 | CG | TYR B 365 | 27.087 | 36.466 | 66.683 | 1.00 | 23.54 | C |
| ATOM | 6131 | CD1 | TYR B 365 | 26.999 | 35.503 | 65.680 | 1.00 | 23.30 | C |
| ATOM | 6132 | CD2 | TYR B 365 | 27.570 | 37.730 | 66.341 | 1.00 | 24.01 | C |
| ATOM | 6133 | CE1 | TYR B 365 | 27.374 | 35.797 | 64.366 | 1.00 | 22.95 | C |
| ATOM | 6134 | CE2 | TYR B 365 | 27.941 | 38.033 | 65.036 | 1.00 | 23.29 | C |
| ATOM | 6135 | CZ | TYR B 365 | 27.837 | 37.065 | 64.055 | 1.00 | 22.50 | C |
| ATOM | 6136 | OH | TYR B 365 | 28.156 | 37.387 | 62.761 | 1.00 | 23.94 | O |
| ATOM | 6137 | N | ALA B 366 | 29.159 | 36.141 | 69.962 | 1.00 | 25.46 | N |
| ATOM | 6138 | CA | ALA B 366 | 30.550 | 36.495 | 70.188 | 1.00 | 26.96 | C |
| ATOM | 6139 | C | ALA B 366 | 31.362 | 35.246 | 70.517 | 1.00 | 27.70 | C |
| ATOM | 6140 | O | ALA B 366 | 32.500 | 35.109 | 70.075 | 1.00 | 27.19 | O |
| ATOM | 6141 | CB | ALA B 366 | 30.661 | 37.504 | 71.325 | 1.00 | 24.31 | C |
| ATOM | 6142 | N | GLN B 367 | 30.765 | 34.330 | 71.276 | 1.00 | 28.43 | N |
| ATOM | 6143 | CA | GLN B 367 | 31.458 | 33.110 | 71.681 | 1.00 | 30.19 | C |
| ATOM | 6144 | C | GLN B 367 | 31.354 | 31.931 | 70.704 | 1.00 | 29.49 | C |
| ATOM | 6145 | O | GLN B 367 | 32.341 | 31.227 | 70.486 | 1.00 | 29.65 | O |
| ATOM | 6146 | CB | GLN B 367 | 30.953 | 32.634 | 73.053 | 1.00 | 32.93 | C |
| ATOM | 6147 | CG | GLN B 367 | 30.457 | 33.719 | 74.017 | 1.00 | 39.68 | C |
| ATOM | 6148 | CD | GLN B 367 | 31.554 | 34.640 | 74.526 | 1.00 | 44.51 | C |
| ATOM | 6149 | OE1 | GLN B 367 | 32.628 | 34.184 | 74.930 | 1.00 | 46.73 | O |
| ATOM | 6150 | NE2 | GLN B 367 | 31.279 | 35.947 | 74.531 | 1.00 | 43.43 | N |
| ATOM | 6151 | N | ASN B 368 | 30.172 | 31.716 | 70.123 | 1.00 | 27.46 | N |
| ATOM | 6152 | CA | ASN B 368 | 29.951 | 30.582 | 69.218 | 1.00 | 26.43 | C |
| ATOM | 6153 | C | ASN B 368 | 29.477 | 30.911 | 67.804 | 1.00 | 25.04 | C |
| ATOM | 6154 | O | ASN B 368 | 29.005 | 30.030 | 67.084 | 1.00 | 23.72 | O |
| ATOM | 6155 | CB | ASN B 368 | 28.942 | 29.626 | 69.850 | 1.00 | 27.82 | C |
| ATOM | 6156 | CG | ASN B 368 | 29.373 | 29.147 | 71.218 | 1.00 | 31.39 | C |
| ATOM | 6157 | OD1 | ASN B 368 | 28.538 | 28.870 | 72.078 | 1.00 | 33.38 | O |
| ATOM | 6158 | ND2 | ASN B 368 | 30.681 | 29.035 | 71.426 | 1.00 | 30.74 | N |
| ATOM | 6159 | N | GLN B 369 | 29.596 | 32.171 | 67.412 | 1.00 | 24.47 | N |
| ATOM | 6160 | CA | GLN B 369 | 29.178 | 32.602 | 66.090 | 1.00 | 22.82 | C |
| ATOM | 6161 | C | GLN B 369 | 27.840 | 32.003 | 65.645 | 1.00 | 21.95 | C |
| ATOM | 6162 | O | GLN B 369 | 26.850 | 32.101 | 66.361 | 1.00 | 21.92 | O |
| ATOM | 6163 | CB | GLN B 369 | 30.274 | 32.293 | 65.067 | 1.00 | 24.34 | C |
| ATOM | 6164 | CG | GLN B 369 | 31.574 | 33.042 | 65.316 | 1.00 | 25.55 | C |
| ATOM | 6165 | CD | GLN B 369 | 32.489 | 32.329 | 66.300 | 1.00 | 26.88 | C |
| ATOM | 6166 | OE1 | GLN B 369 | 32.941 | 32.914 | 67.288 | 1.00 | 27.44 | O |
| ATOM | 6167 | NE2 | GLN B 369 | 32.775 | 31.062 | 66.025 | 1.00 | 23.82 | N |
| ATOM | 6168 | N | MET B 370 | 27.806 | 31.373 | 64.474 | 1.00 | 21.63 | N |
| ATOM | 6169 | CA | MET B 370 | 26.554 | 30.818 | 63.955 | 1.00 | 22.32 | C |
| ATOM | 6170 | C | MET B 370 | 25.724 | 29.918 | 64.866 | 1.00 | 22.05 | C |
| ATOM | 6171 | O | MET B 370 | 24.497 | 29.914 | 64.763 | 1.00 | 22.64 | O |
| ATOM | 6172 | CB | MET B 370 | 26.800 | 30.091 | 62.632 | 1.00 | 19.93 | C |
| ATOM | 6173 | CG | MET B 370 | 27.248 | 31.003 | 61.502 | 1.00 | 20.73 | C |
| ATOM | 6174 | SD | MET B 370 | 26.329 | 32.558 | 61.426 | 1.00 | 23.20 | S |
| ATOM | 6175 | CE | MET B 370 | 24.696 | 31.980 | 61.122 | 1.00 | 19.63 | C |
| ATOM | 6176 | N | SER B 371 | 26.368 | 29.160 | 65.752 | 1.00 | 22.45 | N |
| ATOM | 6177 | CA | SER B 371 | 25.633 | 28.266 | 66.650 | 1.00 | 22.68 | C |
| ATOM | 6178 | C | SER B 371 | 24.595 | 29.016 | 67.486 | 1.00 | 22.36 | C |
| ATOM | 6179 | O | SER B 371 | 23.479 | 28.526 | 67.703 | 1.00 | 21.11 | O |
| ATOM | 6180 | CB | SER B 371 | 26.600 | 27.518 | 67.578 | 1.00 | 23.33 | C |
| ATOM | 6181 | OG | SER B 371 | 27.458 | 26.669 | 66.838 | 1.00 | 24.76 | O |
| ATOM | 6182 | N | ALA B 372 | 24.969 | 30.204 | 67.956 | 1.00 | 21.86 | N |
| ATOM | 6183 | CA | ALA B 372 | 24.076 | 31.028 | 68.769 | 1.00 | 21.26 | C |
| ATOM | 6184 | C | ALA B 372 | 22.874 | 31.498 | 67.945 | 1.00 | 22.20 | C |
| ATOM | 6185 | O | ALA B 372 | 21.753 | 31.579 | 68.451 | 1.00 | 21.98 | O |
| ATOM | 6186 | CB | ALA B 372 | 24.834 | 32.230 | 69.326 | 1.00 | 18.25 | C |
| ATOM | 6187 | N | TYR B 373 | 23.093 | 31.815 | 66.675 | 1.00 | 21.47 | N |
| ATOM | 6188 | CA | TYR B 373 | 21.963 | 32.256 | 65.873 | 1.00 | 22.34 | C |
| ATOM | 6189 | C | TYR B 373 | 21.031 | 31.105 | 65.527 | 1.00 | 21.69 | C |
| ATOM | 6190 | O | TYR B 373 | 19.812 | 31.252 | 65.587 | 1.00 | 22.05 | O |
| ATOM | 6191 | CB | TYR B 373 | 22.399 | 32.930 | 64.575 | 1.00 | 21.93 | C |
| ATOM | 6192 | CG | TYR B 373 | 21.196 | 33.525 | 63.891 | 1.00 | 23.95 | C |
| ATOM | 6193 | CD1 | TYR B 373 | 20.595 | 34.680 | 64.397 | 1.00 | 23.18 | C |
| ATOM | 6194 | CD2 | TYR B 373 | 20.566 | 32.864 | 62.835 | 1.00 | 21.27 | C |
| ATOM | 6195 | CE1 | TYR B 373 | 19.394 | 35.152 | 63.883 | 1.00 | 21.63 | C |
| ATOM | 6196 | CE2 | TYR B 373 | 19.361 | 33.332 | 62.314 | 1.00 | 22.66 | C |
| ATOM | 6197 | CZ | TYR B 373 | 18.784 | 34.473 | 62.849 | 1.00 | 20.55 | C |
| ATOM | 6198 | OH | TYR B 373 | 17.583 | 34.929 | 62.379 | 1.00 | 22.90 | O |
| ATOM | 6199 | N | VAL B 374 | 21.608 | 29.964 | 65.153 | 1.00 | 22.37 | N |

| ATOM | 6200 | CA | VAL | B | 374 | 20.820 | 28.784 | 64.805 | 1.00 | 22.99 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 6201 | C | VAL | B | 374 | 19.882 | 28.378 | 65.946 | 1.00 | 22.26 | C |
| ATOM | 6202 | O | VAL | B | 374 | 18.781 | 27.891 | 65.705 | 1.00 | 22.79 | O |
| ATOM | 6203 | CB | VAL | B | 374 | 21.742 | 27.597 | 64.428 | 1.00 | 23.39 | C |
| ATOM | 6204 | CG1 | VAL | B | 374 | 20.911 | 26.360 | 64.089 | 1.00 | 22.37 | C |
| ATOM | 6205 | CG2 | VAL | B | 374 | 22.598 | 27.984 | 63.235 | 1.00 | 21.78 | C |
| ATOM | 6206 | N | GLU | B | 375 | 20.313 | 28.577 | 67.186 | 1.00 | 22.98 | N |
| ATOM | 6207 | CA | GLU | B | 375 | 19.467 | 28.253 | 68.336 | 1.00 | 24.05 | C |
| ATOM | 6208 | C | GLU | B | 375 | 18.214 | 29.127 | 68.296 | 1.00 | 23.53 | C |
| ATOM | 6209 | O | GLU | B | 375 | 17.113 | 28.667 | 68.596 | 1.00 | 24.83 | O |
| ATOM | 6210 | CB | GLU | B | 375 | 20.201 | 28.525 | 69.651 | 1.00 | 27.13 | C |
| ATOM | 6211 | CG | GLU | B | 375 | 21.106 | 27.412 | 70.133 | 1.00 | 32.75 | C |
| ATOM | 6212 | CD | GLU | B | 375 | 21.841 | 27.786 | 71.408 | 1.00 | 36.51 | C |
| ATOM | 6213 | OE1 | GLU | B | 375 | 21.200 | 28.356 | 72.321 | 1.00 | 39.95 | O |
| ATOM | 6214 | OE2 | GLU | B | 375 | 23.056 | 27.506 | 71.500 | 1.00 | 37.21 | O |
| ATOM | 6215 | N | LEU | B | 376 | 18.388 | 30.398 | 67.944 | 1.00 | 21.35 | N |
| ATOM | 6216 | CA | LEU | B | 376 | 17.255 | 31.309 | 67.866 | 1.00 | 20.87 | C |
| ATOM | 6217 | C | LEU | B | 376 | 16.327 | 30.883 | 66.736 | 1.00 | 20.39 | C |
| ATOM | 6218 | O | LEU | B | 376 | 15.116 | 30.769 | 66.934 | 1.00 | 17.85 | O |
| ATOM | 6219 | CB | LEU | B | 376 | 17.722 | 32.754 | 67.635 | 1.00 | 19.68 | C |
| ATOM | 6220 | CG | LEU | B | 376 | 16.596 | 33.785 | 67.443 | 1.00 | 22.20 | C |
| ATOM | 6221 | CD1 | LEU | B | 376 | 15.642 | 33.745 | 68.639 | 1.00 | 17.86 | C |
| ATOM | 6222 | CD2 | LEU | B | 376 | 17.187 | 35.193 | 67.270 | 1.00 | 20.82 | C |
| ATOM | 6223 | N | GLN | B | 377 | 16.900 | 30.642 | 65.557 | 1.00 | 19.69 | N |
| ATOM | 6224 | CA | GLN | B | 377 | 16.102 | 30.234 | 64.410 | 1.00 | 21.60 | C |
| ATOM | 6225 | C | GLN | B | 377 | 15.304 | 28.977 | 64.745 | 1.00 | 22.61 | C |
| ATOM | 6226 | O | GLN | B | 377 | 14.144 | 28.851 | 64.357 | 1.00 | 21.49 | O |
| ATOM | 6227 | CB | GLN | B | 377 | 16.987 | 29.987 | 63.180 | 1.00 | 21.03 | C |
| ATOM | 6228 | CG | GLN | B | 377 | 16.174 | 29.603 | 61.936 | 1.00 | 24.38 | C |
| ATOM | 6229 | CD | GLN | B | 377 | 17.006 | 29.523 | 60.663 | 1.00 | 24.80 | C |
| ATOM | 6230 | OE1 | GLN | B | 377 | 16.806 | 30.298 | 59.725 | 1.00 | 24.38 | O |
| ATOM | 6231 | NE2 | GLN | B | 377 | 17.944 | 28.585 | 60.625 | 1.00 | 23.74 | N |
| ATOM | 6232 | N | GLU | B | 378 | 15.922 | 28.053 | 65.480 | 1.00 | 23.42 | N |
| ATOM | 6233 | CA | GLU | B | 378 | 15.235 | 26.823 | 65.857 | 1.00 | 24.40 | C |
| ATOM | 6234 | C | GLU | B | 378 | 14.113 | 27.094 | 66.858 | 1.00 | 22.87 | C |
| ATOM | 6235 | O | GLU | B | 378 | 13.097 | 26.400 | 66.857 | 1.00 | 23.77 | O |
| ATOM | 6236 | CB | GLU | B | 378 | 16.221 | 25.802 | 66.434 | 1.00 | 24.36 | C |
| ATOM | 6237 | CG | GLU | B | 378 | 17.133 | 25.150 | 65.397 | 1.00 | 26.46 | C |
| ATOM | 6238 | CD | GLU | B | 378 | 16.368 | 24.388 | 64.318 | 1.00 | 29.63 | C |
| ATOM | 6239 | OE1 | GLU | B | 378 | 15.507 | 23.548 | 64.664 | 1.00 | 28.84 | O |
| ATOM | 6240 | OE2 | GLU | B | 378 | 16.637 | 24.624 | 63.118 | 1.00 | 30.38 | O |
| ATOM | 6241 | N | ARG | B | 379 | 14.289 | 28.095 | 67.713 | 1.00 | 22.81 | N |
| ATOM | 6242 | CA | ARG | B | 379 | 13.241 | 28.417 | 68.675 | 1.00 | 23.64 | C |
| ATOM | 6243 | C | ARG | B | 379 | 12.080 | 29.019 | 67.901 | 1.00 | 23.26 | C |
| ATOM | 6244 | O | ARG | B | 379 | 10.914 | 28.774 | 68.220 | 1.00 | 23.25 | O |
| ATOM | 6245 | CB | ARG | B | 379 | 13.737 | 29.402 | 69.735 | 1.00 | 25.23 | C |
| ATOM | 6246 | CG | ARG | B | 379 | 14.739 | 28.807 | 70.720 | 1.00 | 27.59 | C |
| ATOM | 6247 | CD | ARG | B | 379 | 14.702 | 29.551 | 72.056 | 1.00 | 31.46 | C |
| ATOM | 6248 | NE | ARG | B | 379 | 15.188 | 30.924 | 71.955 | 1.00 | 34.40 | N |
| ATOM | 6249 | CZ | ARG | B | 379 | 16.470 | 31.254 | 71.843 | 1.00 | 37.50 | C |
| ATOM | 6250 | NH1 | ARG | B | 379 | 17.402 | 30.307 | 71.820 | 1.00 | 39.12 | N |
| ATOM | 6251 | NH2 | ARG | B | 379 | 16.823 | 32.530 | 71.755 | 1.00 | 37.39 | N |
| ATOM | 6252 | N | GLU | B | 380 | 12.409 | 29.791 | 66.867 | 1.00 | 21.90 | N |
| ATOM | 6253 | CA | GLU | B | 380 | 11.396 | 30.410 | 66.021 | 1.00 | 22.04 | C |
| ATOM | 6254 | C | GLU | B | 380 | 10.572 | 29.323 | 65.351 | 1.00 | 23.42 | C |
| ATOM | 6255 | O | GLU | B | 380 | 9.336 | 29.367 | 65.370 | 1.00 | 23.15 | O |
| ATOM | 6256 | CB | GLU | B | 380 | 12.044 | 31.297 | 64.961 | 1.00 | 21.66 | C |
| ATOM | 6257 | CG | GLU | B | 380 | 12.533 | 32.634 | 65.492 | 1.00 | 21.52 | C |
| ATOM | 6258 | CD | GLU | B | 380 | 13.074 | 33.531 | 64.396 | 1.00 | 22.74 | C |
| ATOM | 6259 | OE1 | GLU | B | 380 | 14.183 | 33.258 | 63.892 | 1.00 | 22.20 | O |
| ATOM | 6260 | OE2 | GLU | B | 380 | 12.380 | 34.505 | 64.028 | 1.00 | 24.15 | O |
| ATOM | 6261 | N | PHE | B | 381 | 11.253 | 28.344 | 64.761 | 1.00 | 23.73 | N |
| ATOM | 6262 | CA | PHE | B | 381 | 10.555 | 27.233 | 64.114 | 1.00 | 25.49 | C |
| ATOM | 6263 | C | PHE | B | 381 | 9.631 | 26.561 | 65.128 | 1.00 | 25.39 | C |
| ATOM | 6264 | O | PHE | B | 381 | 8.461 | 26.296 | 64.848 | 1.00 | 25.97 | O |
| ATOM | 6265 | CB | PHE | B | 381 | 11.548 | 26.183 | 63.583 | 1.00 | 24.55 | C |
| ATOM | 6266 | CG | PHE | B | 381 | 12.252 | 26.586 | 62.315 | 1.00 | 25.19 | C |
| ATOM | 6267 | CD1 | PHE | B | 381 | 11.533 | 27.067 | 61.224 | 1.00 | 25.44 | C |
| ATOM | 6268 | CD2 | PHE | B | 381 | 13.632 | 26.446 | 62.199 | 1.00 | 25.53 | C |
| ATOM | 6269 | CE1 | PHE | B | 381 | 12.176 | 27.401 | 60.035 | 1.00 | 24.79 | C |
| ATOM | 6270 | CE2 | PHE | B | 381 | 14.284 | 26.776 | 61.015 | 1.00 | 26.38 | C |
| ATOM | 6271 | CZ | PHE | B | 381 | 13.550 | 27.256 | 59.928 | 1.00 | 25.28 | C |
| ATOM | 6272 | N | ALA | B | 382 | 10.166 | 26.294 | 66.312 | 1.00 | 25.17 | N |
| ATOM | 6273 | CA | ALA | B | 382 | 9.398 | 25.640 | 67.358 | 1.00 | 26.34 | C |
| ATOM | 6274 | C | ALA | B | 382 | 8.190 | 26.456 | 67.802 | 1.00 | 26.22 | C |
| ATOM | 6275 | O | ALA | B | 382 | 7.164 | 25.894 | 68.167 | 1.00 | 27.32 | O |
| ATOM | 6276 | CB | ALA | B | 382 | 10.299 | 25.346 | 68.555 | 1.00 | 26.81 | C |
| ATOM | 6277 | N | ALA | B | 383 | 8.300 | 27.778 | 67.771 | 1.00 | 25.88 | N |
| ATOM | 6278 | CA | ALA | B | 383 | 7.186 | 28.615 | 68.199 | 1.00 | 23.86 | C |
| ATOM | 6279 | C | ALA | B | 383 | 6.074 | 28.666 | 67.156 | 1.00 | 25.46 | C |

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ATOM   6280  O   ALA B 383      4.979  29.169  67.430  1.00 24.12           O
ATOM   6281  CB  ALA B 383      7.678  30.018  68.518  1.00 23.88           C
ATOM   6282  N   GLU B 384      6.341  28.131  65.967  1.00 26.73           N
ATOM   6283  CA  GLU B 384      5.335  28.144  64.906  1.00 30.00           C
ATOM   6284  C   GLU B 384      4.057  27.414  65.303  1.00 30.63           C
ATOM   6285  O   GLU B 384      2.973  27.766  64.841  1.00 28.36           O
ATOM   6286  CB  GLU B 384      5.894  27.545  63.611  1.00 30.35           C
ATOM   6287  CG  GLU B 384      7.083  28.320  63.052  1.00 34.29           C
ATOM   6288  CD  GLU B 384      7.456  27.902  61.645  1.00 34.94           C
ATOM   6289  OE1 GLU B 384      7.442  26.690  61.357  1.00 38.03           O
ATOM   6290  OE2 GLU B 384      7.779  28.787  60.829  1.00 39.27           O
ATOM   6291  N   GLU B 385      4.177  26.404  66.160  1.00 31.60           N
ATOM   6292  CA  GLU B 385      2.994  25.678  66.585  1.00 35.03           C
ATOM   6293  C   GLU B 385      2.151  26.518  67.539  1.00 34.07           C
ATOM   6294  O   GLU B 385      0.988  26.201  67.786  1.00 34.94           O
ATOM   6295  CB  GLU B 385      3.373  24.333  67.217  1.00 37.77           C
ATOM   6296  CG  GLU B 385      4.367  24.389  68.350  1.00 44.51           C
ATOM   6297  CD  GLU B 385      4.843  22.999  68.749  1.00 48.89           C
ATOM   6298  OE1 GLU B 385      3.982  22.134  69.027  1.00 48.75           O
ATOM   6299  OE2 GLU B 385      6.074  22.772  68.782  1.00 51.39           O
ATOM   6300  N   ARG B 386      2.737  27.594  68.062  1.00 32.86           N
ATOM   6301  CA  ARG B 386      2.022  28.504  68.958  1.00 31.04           C
ATOM   6302  C   ARG B 386      1.398  29.638  68.138  1.00 29.52           C
ATOM   6303  O   ARG B 386      0.673  30.479  68.668  1.00 28.47           O
ATOM   6304  CB  ARG B 386      2.970  29.104  70.010  1.00 31.45           C
ATOM   6305  CG  ARG B 386      3.363  28.157  71.135  1.00 34.91           C
ATOM   6306  CD  ARG B 386      4.131  28.880  72.238  1.00 35.91           C
ATOM   6307  NE  ARG B 386      5.471  29.296  71.824  1.00 39.09           N
ATOM   6308  CZ  ARG B 386      6.229  30.154  72.505  1.00 39.62           C
ATOM   6309  NH1 ARG B 386      5.773  30.691  73.631  1.00 39.69           N
ATOM   6310  NH2 ARG B 386      7.446  30.471  72.072  1.00 37.08           N
ATOM   6311  N   GLY B 387      1.693  29.662  66.842  1.00 28.72           N
ATOM   6312  CA  GLY B 387      1.148  30.701  65.983  1.00 28.22           C
ATOM   6313  C   GLY B 387      2.186  31.638  65.384  1.00 27.23           C
ATOM   6314  O   GLY B 387      1.870  32.442  64.508  1.00 28.32           O
ATOM   6315  N   TYR B 388      3.426  31.539  65.846  1.00 25.75           N
ATOM   6316  CA  TYR B 388      4.498  32.390  65.338  1.00 25.04           C
ATOM   6317  C   TYR B 388      4.625  32.221  63.827  1.00 25.29           C
ATOM   6318  O   TYR B 388      4.568  31.099  63.315  1.00 26.24           O
ATOM   6319  CB  TYR B 388      5.820  32.020  66.002  1.00 22.12           C
ATOM   6320  CG  TYR B 388      6.932  32.988  65.708  1.00 21.87           C
ATOM   6321  CD1 TYR B 388      6.874  34.305  66.171  1.00 20.26           C
ATOM   6322  CD2 TYR B 388      8.063  32.585  64.997  1.00 18.29           C
ATOM   6323  CE1 TYR B 388      7.918  35.196  65.940  1.00 19.35           C
ATOM   6324  CE2 TYR B 388      9.112  33.462  64.762  1.00 19.23           C
ATOM   6325  CZ  TYR B 388      9.037  34.767  65.239  1.00 20.12           C
ATOM   6326  OH  TYR B 388     10.095  35.626  65.050  1.00 18.27           O
ATOM   6327  N   THR B 389      4.813  33.329  63.118  1.00 23.98           N
ATOM   6328  CA  THR B 389      4.926  33.285  61.663  1.00 22.77           C
ATOM   6329  C   THR B 389      6.102  34.075  61.100  1.00 22.70           C
ATOM   6330  O   THR B 389      6.369  34.012  59.906  1.00 22.66           O
ATOM   6331  CB  THR B 389      3.654  33.839  60.993  1.00 22.86           C
ATOM   6332  OG1 THR B 389      3.466  35.200  61.396  1.00 20.58           O
ATOM   6333  CG2 THR B 389      2.427  33.014  61.388  1.00 21.37           C
ATOM   6334  N   ALA B 390      6.799  34.817  61.953  1.00 22.76           N
ATOM   6335  CA  ALA B 390      7.919  35.638  61.504  1.00 21.33           C
ATOM   6336  C   ALA B 390      9.155  34.865  61.048  1.00 21.21           C
ATOM   6337  O   ALA B 390     10.096  35.464  60.535  1.00 20.31           O
ATOM   6338  CB  ALA B 390      8.303  36.631  62.596  1.00 20.68           C
ATOM   6339  N   THR B 391      9.170  33.547  61.234  1.00 20.99           N
ATOM   6340  CA  THR B 391     10.320  32.759  60.793  1.00 21.07           C
ATOM   6341  C   THR B 391     10.459  32.946  59.280  1.00 20.63           C
ATOM   6342  O   THR B 391     11.565  32.959  58.730  1.00 18.21           O
ATOM   6343  CB  THR B 391     10.148  31.263  61.104  1.00 23.90           C
ATOM   6344  OG1 THR B 391      9.661  31.098  62.443  1.00 22.91           O
ATOM   6345  CG2 THR B 391     11.492  30.561  60.989  1.00 22.27           C
ATOM   6346  N   LYS B 392      9.322  33.084  58.606  1.00 20.26           N
ATOM   6347  CA  LYS B 392      9.328  33.331  57.172  1.00 20.84           C
ATOM   6348  C   LYS B 392      9.186  34.851  57.079  1.00 19.49           C
ATOM   6349  O   LYS B 392      8.093  35.390  56.887  1.00 16.46           O
ATOM   6350  CB  LYS B 392      8.163  32.604  56.500  1.00 21.84           C
ATOM   6351  CG  LYS B 392      8.193  31.106  56.779  1.00 25.28           C
ATOM   6352  CD  LYS B 392      7.704  30.283  55.617  1.00 27.88           C
ATOM   6353  CE  LYS B 392      6.218  30.419  55.405  1.00 32.09           C
ATOM   6354  NZ  LYS B 392      5.814  29.771  54.123  1.00 34.23           N
ATOM   6355  N   HIS B 393     10.318  35.527  57.253  1.00 18.65           N
ATOM   6356  CA  HIS B 393     10.371  36.984  57.247  1.00 20.15           C
ATOM   6357  C   HIS B 393      9.907  37.707  55.984  1.00 18.46           C
ATOM   6358  O   HIS B 393      9.379  38.821  56.079  1.00 18.43           O
ATOM   6359  CB  HIS B 393     11.786  37.459  57.612  1.00 18.54           C
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ATOM   6360  CG  HIS B 393     12.873  36.812  56.813  1.00 19.87           C
ATOM   6361  ND1 HIS B 393     13.749  35.894  57.356  1.00 19.65           N
ATOM   6362  CD2 HIS B 393     13.244  36.969  55.520  1.00 17.65           C
ATOM   6363  CE1 HIS B 393     14.615  35.518  56.431  1.00 19.24           C
ATOM   6364  NE2 HIS B 393     14.331  36.157  55.309  1.00 17.04           N
ATOM   6365  N   GLN B 394     10.100  37.092  54.816  1.00 16.87           N
ATOM   6366  CA  GLN B 394      9.711  37.721  53.553  1.00 17.93           C
ATOM   6367  C   GLN B 394      8.215  53.010  53.521  1.00 17.64           C
ATOM   6368  O   GLN B 394      7.803  39.157  53.375  1.00 15.82           O
ATOM   6369  CB  GLN B 394     10.098  36.836  52.358  1.00 18.44           C
ATOM   6370  CG  GLN B 394     11.556  36.378  52.367  1.00 16.41           C
ATOM   6371  CD  GLN B 394     12.546  37.508  52.149  1.00 19.42           C
ATOM   6372  OE1 GLN B 394     12.275  38.665  52.476  1.00 16.81           O
ATOM   6373  NE2 GLN B 394     13.717  37.171  51.607  1.00 18.45           N
ATOM   6374  N   ARG B 395      7.407  36.966  53.665  1.00 17.54           N
ATOM   6375  CA  ARG B 395      5.961  37.130  53.655  1.00 17.47           C
ATOM   6376  C   ARG B 395      5.523  37.953  54.852  1.00 16.58           C
ATOM   6377  O   ARG B 395      4.608  38.770  54.746  1.00 18.04           O
ATOM   6378  CB  ARG B 395      5.259  35.769  53.689  1.00 17.43           C
ATOM   6379  CG  ARG B 395      5.731  34.868  54.807  1.00 19.07           C
ATOM   6380  CD  ARG B 395      4.614  33.961  55.277  1.00 21.13           C
ATOM   6381  NE  ARG B 395      3.515  34.720  55.865  1.00 21.36           N
ATOM   6382  CZ  ARG B 395      3.609  35.439  56.982  1.00 22.93           C
ATOM   6383  NH1 ARG B 395      4.761  35.503  57.644  1.00 18.73           N
ATOM   6384  NH2 ARG B 395      2.543  36.086  57.443  1.00 21.96           N
ATOM   6385  N   GLU B 396      6.185  37.740  55.986  1.00 14.08           N
ATOM   6386  CA  GLU B 396      5.868  38.453  57.217  1.00 15.55           C
ATOM   6387  C   GLU B 396      5.889  39.961  57.006  1.00 17.99           C
ATOM   6388  O   GLU B 396      5.166  40.699  57.671  1.00 18.35           O
ATOM   6389  CB  GLU B 396      6.885  38.093  58.307  1.00 16.99           C
ATOM   6390  CG  GLU B 396      6.608  38.683  59.696  1.00 15.26           C
ATOM   6391  CD  GLU B 396      5.385  38.064  60.386  1.00 17.33           C
ATOM   6392  OE1 GLU B 396      5.008  36.919  60.059  1.00 11.42           O
ATOM   6393  OE2 GLU B 396      4.812  38.724  61.274  1.00 15.41           O
ATOM   6394  N   VAL B 397      6.721  40.421  56.080  1.00 18.36           N
ATOM   6395  CA  VAL B 397      6.825  41.851  55.836  1.00 20.57           C
ATOM   6396  C   VAL B 397      6.094  42.308  54.560  1.00 20.20           C
ATOM   6397  O   VAL B 397      6.242  43.444  54.117  1.00 20.82           O
ATOM   6398  CB  VAL B 397      8.335  42.289  55.845  1.00 21.31           C
ATOM   6399  CG1 VAL B 397      9.066  41.786  54.616  1.00 21.95           C
ATOM   6400  CG2 VAL B 397      8.433  43.770  55.943  1.00 28.30           C
ATOM   6401  N   GLY B 398      5.293  41.417  53.977  1.00 19.04           N
ATOM   6402  CA  GLY B 398      4.521  41.787  52.801  1.00 17.98           C
ATOM   6403  C   GLY B 398      5.015  41.420  51.414  1.00 18.90           C
ATOM   6404  O   GLY B 398      4.443  41.880  50.425  1.00 16.21           O
ATOM   6405  N   ALA B 399      6.065  40.606  51.325  1.00 19.15           N
ATOM   6406  CA  ALA B 399      6.601  40.200  50.026  1.00 19.63           C
ATOM   6407  C   ALA B 399      5.482  39.613  49.166  1.00 17.78           C
ATOM   6408  O   ALA B 399      5.429  39.842  47.958  1.00 17.84           O
ATOM   6409  CB  ALA B 399      7.724  39.164  50.211  1.00 16.47           C
ATOM   6410  N   GLY B 400      4.594  38.857  49.804  1.00 17.79           N
ATOM   6411  CA  GLY B 400      3.481  38.248  49.096  1.00 17.98           C
ATOM   6412  C   GLY B 400      2.429  39.276  48.723  1.00 18.41           C
ATOM   6413  O   GLY B 400      1.818  39.200  47.659  1.00 19.43           O
ATOM   6414  N   TYR B 401      2.217  40.246  49.605  1.00 19.80           N
ATOM   6415  CA  TYR B 401      1.243  41.294  49.358  1.00 18.95           C
ATOM   6416  C   TYR B 401      1.671  42.152  48.167  1.00 20.02           C
ATOM   6417  O   TYR B 401      0.867  42.424  47.270  1.00 22.86           O
ATOM   6418  CB  TYR B 401      1.078  42.168  50.598  1.00 17.66           C
ATOM   6419  CG  TYR B 401      0.072  43.281  50.421  1.00 19.44           C
ATOM   6420  CD1 TYR B 401     -1.296  43.006  50.317  1.00 18.80           C
ATOM   6421  CD2 TYR B 401      0.487  44.611  50.339  1.00 15.51           C
ATOM   6422  CE1 TYR B 401     -2.222  44.028  50.136  1.00 16.48           C
ATOM   6423  CE2 TYR B 401     -0.426  45.641  50.161  1.00 15.14           C
ATOM   6424  CZ  TYR B 401     -1.779  45.349  50.061  1.00 18.15           C
ATOM   6425  OH  TYR B 401     -2.681  46.380  49.908  1.00 12.99           O
ATOM   6426  N   PHE B 402      2.931  42.575  48.146  1.00 17.82           N
ATOM   6427  CA  PHE B 402      3.397  43.390  47.038  1.00 18.12           C
ATOM   6428  C   PHE B 402      3.483  42.596  45.736  1.00 17.86           C
ATOM   6429  O   PHE B 402      3.372  43.165  44.652  1.00 16.09           O
ATOM   6430  CB  PHE B 402      4.723  44.081  47.394  1.00 16.67           C
ATOM   6431  CG  PHE B 402      4.537  45.287  48.291  1.00 16.37           C
ATOM   6432  CD1 PHE B 402      4.347  45.132  49.661  1.00 14.56           C
ATOM   6433  CD2 PHE B 402      4.433  46.567  47.745  1.00 15.68           C
ATOM   6434  CE1 PHE B 402      4.048  46.229  50.476  1.00 15.51           C
ATOM   6435  CE2 PHE B 402      4.133  47.672  48.547  1.00 16.21           C
ATOM   6436  CZ  PHE B 402      3.937  47.503  49.918  1.00 16.05           C
ATOM   6437  N   ASP B 403      3.656  41.280  45.836  1.00 19.02           N
ATOM   6438  CA  ASP B 403      3.688  40.451  44.637  1.00 21.01           C
ATOM   6439  C   ASP B 403      2.288  40.527  44.033  1.00 21.05           C
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ATOM   6440  O    ASP B 403      2.123  40.559  42.814  1.00 22.45           O
ATOM   6441  CB   ASP B 403      4.016  38.990  44.979  1.00 21.11           C
ATOM   6442  CG   ASP B 403      5.504  38.680  44.872  1.00 24.69           C
ATOM   6443  OD1  ASP B 403      6.285  39.576  44.482  1.00 24.29           O
ATOM   6444  OD2  ASP B 403      5.895  37.532  45.175  1.00 25.75           O
ATOM   6445  N    ARG B 404      1.284  40.565  44.909  1.00 21.16           N
ATOM   6446  CA   ARG B 404     -0.113  40.636  44.498  1.00 21.03           C
ATOM   6447  C    ARG B 404     -0.345  41.956  43.780  1.00 19.29           C
ATOM   6448  O    ARG B 404     -0.983  42.005  42.735  1.00 20.16           O
ATOM   6449  CB   ARG B 404     -1.027  40.525  45.723  1.00 24.14           C
ATOM   6450  CG   ARG B 404     -2.503  40.374  45.400  1.00 30.07           C
ATOM   6451  CD   ARG B 404     -2.751  39.151  44.523  1.00 35.30           C
ATOM   6452  NE   ARG B 404     -4.152  39.022  44.119  1.00 40.43           N
ATOM   6453  CZ   ARG B 404     -5.109  38.475  44.864  1.00 41.04           C
ATOM   6454  NH1  ARG B 404     -4.831  37.992  46.070  1.00 39.83           N
ATOM   6455  NH2  ARG B 404     -6.346  38.402  44.393  1.00 41.14           N
ATOM   6456  N    ILE B 405      0.172  43.035  44.347  1.00 17.81           N
ATOM   6457  CA   ILE B 405      0.028  44.327  43.706  1.00 15.72           C
ATOM   6458  C    ILE B 405      0.728  44.270  42.348  1.00 16.34           C
ATOM   6459  O    ILE B 405      0.180  44.713  41.340  1.00 16.65           O
ATOM   6460  CB   ILE B 405      0.658  45.449  44.555  1.00 13.18           C
ATOM   6461  CG1  ILE B 405     -0.119  45.615  45.859  1.00 13.20           C
ATOM   6462  CG2  ILE B 405      0.645  46.755  43.783  1.00 13.82           C
ATOM   6463  CD1  ILE B 405      0.507  46.596  46.832  1.00 12.71           C
ATOM   6464  N    ALA B 406      1.936  43.710  42.318  1.00 16.88           N
ATOM   6465  CA   ALA B 406      2.694  43.623  41.067  1.00 18.80           C
ATOM   6466  C    ALA B 406      1.971  42.849  39.969  1.00 18.61           C
ATOM   6467  O    ALA B 406      1.990  43.257  38.811  1.00 17.17           O
ATOM   6468  CB   ALA B 406      4.061  42.997  41.313  1.00 15.36           C
ATOM   6469  N    THR B 407      1.346  41.733  40.335  1.00 19.72           N
ATOM   6470  CA   THR B 407      0.632  40.911  39.365  1.00 19.09           C
ATOM   6471  C    THR B 407     -0.724  41.507  39.011  1.00 20.09           C
ATOM   6472  O    THR B 407     -1.311  41.149  37.991  1.00 21.18           O
ATOM   6473  CB   THR B 407      0.442  39.468  39.880  1.00 18.53           C
ATOM   6474  OG1  THR B 407     -0.218  39.496  41.149  1.00 20.63           O
ATOM   6475  CG2  THR B 407      1.795  38.773  40.034  1.00 17.85           C
ATOM   6476  N    THR B 408     -1.227  42.412  39.850  1.00 20.57           N
ATOM   6477  CA   THR B 408     -2.505  43.064  39.558  1.00 21.22           C
ATOM   6478  C    THR B 408     -2.247  44.113  38.477  1.00 21.44           C
ATOM   6479  O    THR B 408     -3.056  44.301  37.567  1.00 21.28           O
ATOM   6480  CB   THR B 408     -3.108  43.766  40.800  1.00 20.95           C
ATOM   6481  OG1  THR B 408     -3.433  42.788  41.796  1.00 19.87           O
ATOM   6482  CG2  THR B 408     -4.380  44.523  40.420  1.00 18.51           C
ATOM   6483  N    VAL B 409     -1.108  44.791  38.589  1.00 21.73           N
ATOM   6484  CA   VAL B 409     -0.719  45.810  37.621  1.00 22.35           C
ATOM   6485  C    VAL B 409     -0.288  45.133  36.323  1.00 23.81           C
ATOM   6486  O    VAL B 409     -0.655  45.567  35.237  1.00 23.87           O
ATOM   6487  CB   VAL B 409      0.453  46.673  38.145  1.00 21.31           C
ATOM   6488  CG1  VAL B 409      0.997  47.552  37.027  1.00 20.11           C
ATOM   6489  CG2  VAL B 409     -0.013  47.534  39.303  1.00 19.80           C
ATOM   6490  N    ASP B 410      0.501  44.074  36.444  1.00 24.37           N
ATOM   6491  CA   ASP B 410      0.964  43.337  35.281  1.00 27.32           C
ATOM   6492  C    ASP B 410      1.065  41.853  35.619  1.00 28.75           C
ATOM   6493  O    ASP B 410      2.045  41.406  36.209  1.00 27.76           O
ATOM   6494  CB   ASP B 410      2.322  43.874  34.813  1.00 28.22           C
ATOM   6495  CG   ASP B 410      2.904  43.072  33.662  1.00 28.47           C
ATOM   6496  OD1  ASP B 410      2.125  42.468  32.901  1.00 31.07           O
ATOM   6497  OD2  ASP B 410      4.140  43.056  33.507  1.00 27.87           O
ATOM   6498  N    PRO B 411      0.037  41.070  35.254  1.00 31.25           N
ATOM   6499  CA   PRO B 411      0.058  39.633  35.541  1.00 31.30           C
ATOM   6500  C    PRO B 411      1.220  38.871  34.901  1.00 32.55           C
ATOM   6501  O    PRO B 411      1.634  37.833  35.417  1.00 34.62           O
ATOM   6502  CB   PRO B 411     -1.318  39.157  35.056  1.00 30.67           C
ATOM   6503  CG   PRO B 411     -1.707  40.168  34.028  1.00 30.38           C
ATOM   6504  CD   PRO B 411     -1.236  41.466  34.625  1.00 30.07           C
ATOM   6505  N    ASN B 412      1.757  39.383  33.795  1.00 32.40           N
ATOM   6506  CA   ASN B 412      2.878  38.722  33.124  1.00 34.24           C
ATOM   6507  C    ASN B 412      4.236  39.251  33.584  1.00 34.52           C
ATOM   6508  O    ASN B 412      5.239  39.069  32.894  1.00 36.05           O
ATOM   6509  CB   ASN B 412      2.784  38.889  31.603  1.00 35.23           C
ATOM   6510  CG   ASN B 412      1.445  38.456  31.046  1.00 37.74           C
ATOM   6511  OD1  ASN B 412      0.963  37.355  31.324  1.00 38.18           O
ATOM   6512  ND2  ASN B 412      0.835  39.323  30.246  1.00 39.43           N
ATOM   6513  N    SER B 413      4.271  39.907  34.739  1.00 33.25           N
ATOM   6514  CA   SER B 413      5.518  40.459  35.264  1.00 32.68           C
ATOM   6515  C    SER B 413      6.542  39.378  35.573  1.00 33.00           C
ATOM   6516  O    SER B 413      6.236  38.416  36.274  1.00 33.61           O
ATOM   6517  CB   SER B 413      5.258  41.252  36.540  1.00 32.26           C
ATOM   6518  OG   SER B 413      6.482  41.504  37.207  1.00 30.38           O
ATOM   6519  N    SER B 414      7.761  39.548  35.067  1.00 32.27           N
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ATOM   6520  CA   SER B 414      8.825  38.575  35.303  1.00 33.67           C
ATOM   6521  C    SER B 414      9.721  38.968  36.474  1.00 32.76           C
ATOM   6522  O    SER B 414     10.789  38.389  36.676  1.00 32.39           O
ATOM   6523  CB   SER B 414      9.680  38.392  34.044  1.00 34.13           C
ATOM   6524  OG   SER B 414     10.323  39.598  33.669  1.00 37.40           O
ATOM   6525  N    THR B 415      9.274  39.935  37.264  1.00 32.20           N
ATOM   6526  CA   THR B 415     10.067  40.388  38.394  1.00 31.58           C
ATOM   6527  C    THR B 415      9.400  40.250  39.762  1.00 31.16           C
ATOM   6528  O    THR B 415      9.668  41.051  40.659  1.00 30.83           O
ATOM   6529  CB   THR B 415     10.495  41.856  38.197  1.00 32.74           C
ATOM   6530  OG1  THR B 415      9.329  42.682  38.058  1.00 32.71           O
ATOM   6531  CG2  THR B 415     11.361  41.988  36.950  1.00 31.24           C
ATOM   6532  N    THR B 416      8.539  39.248  39.928  1.00 29.43           N
ATOM   6533  CA   THR B 416      7.886  39.040  41.218  1.00 29.17           C
ATOM   6534  C    THR B 416      8.929  38.522  42.207  1.00 28.24           C
ATOM   6535  O    THR B 416      9.965  38.008  41.799  1.00 26.19           O
ATOM   6536  CB   THR B 416      6.704  38.054  41.114  1.00 29.47           C
ATOM   6537  OG1  THR B 416      7.139  36.836  40.503  1.00 27.98           O
ATOM   6538  CG2  THR B 416      5.581  38.675  40.287  1.00 29.88           C
ATOM   6539  N    ALA B 417      8.641  38.644  43.500  1.00 29.71           N
ATOM   6540  CA   ALA B 417      9.586  38.269  44.554  1.00 30.10           C
ATOM   6541  C    ALA B 417      9.601  36.863  45.149  1.00 30.39           C
ATOM   6542  O    ALA B 417     10.662  36.239  45.221  1.00 27.86           O
ATOM   6543  CB   ALA B 417      9.476  39.278  45.695  1.00 30.33           C
ATOM   6544  N    LEU B 418      8.450  36.372  45.600  1.00 30.73           N
ATOM   6545  CA   LEU B 418      8.407  35.058  46.237  1.00 32.86           C
ATOM   6546  C    LEU B 418      8.769  33.858  45.375  1.00 32.63           C
ATOM   6547  O    LEU B 418      9.428  32.938  45.857  1.00 33.15           O
ATOM   6548  CB   LEU B 418      7.043  34.824  46.901  1.00 32.78           C
ATOM   6549  CG   LEU B 418      6.797  35.663  48.164  1.00 33.79           C
ATOM   6550  CD1  LEU B 418      5.545  35.170  48.875  1.00 31.18           C
ATOM   6551  CD2  LEU B 418      8.006  35.561  49.095  1.00 32.01           C
ATOM   6552  N    THR B 419      8.346  33.856  44.116  1.00 31.94           N
ATOM   6553  CA   THR B 419      8.657  32.739  43.229  1.00 32.10           C
ATOM   6554  C    THR B 419     10.165  32.649  43.016  1.00 32.32           C
ATOM   6555  O    THR B 419     10.793  33.580  42.508  1.00 31.06           O
ATOM   6556  CB   THR B 419      7.954  32.891  41.855  1.00 32.47           C
ATOM   6557  OG1  THR B 419      6.533  32.780  42.023  1.00 32.09           O
ATOM   6558  CG2  THR B 419      8.426  31.818  40.897  1.00 30.44           C
ATOM   6559  N    GLY B 420     10.746  31.523  43.415  1.00 32.57           N
ATOM   6560  CA   GLY B 420     12.176  31.343  43.260  1.00 33.49           C
ATOM   6561  C    GLY B 420     12.977  31.799  44.468  1.00 33.57           C
ATOM   6562  O    GLY B 420     14.197  31.651  44.493  1.00 35.19           O
ATOM   6563  N    SER B 421     12.303  32.353  45.471  1.00 32.46           N
ATOM   6564  CA   SER B 421     12.988  32.813  46.678  1.00 32.42           C
ATOM   6565  C    SER B 421     13.407  31.610  47.523  1.00 33.27           C
ATOM   6566  O    SER B 421     12.864  30.512  47.368  1.00 31.68           O
ATOM   6567  CB   SER B 421     12.063  33.704  47.505  1.00 30.41           C
ATOM   6568  OG   SER B 421     11.003  32.944  48.054  1.00 25.67           O
ATOM   6569  N    THR B 422     14.363  31.815  48.422  1.00 32.66           N
ATOM   6570  CA   THR B 422     14.818  30.725  49.269  1.00 34.44           C
ATOM   6571  C    THR B 422     13.752  30.417  50.318  1.00 34.92           C
ATOM   6572  O    THR B 422     13.677  29.299  50.838  1.00 34.54           O
ATOM   6573  CB   THR B 422     16.150  31.066  49.971  1.00 33.34           C
ATOM   6574  OG1  THR B 422     15.990  32.249  50.762  1.00 36.44           O
ATOM   6575  CG2  THR B 422     17.239  31.304  48.945  1.00 35.34           C
ATOM   6576  N    GLU B 423     12.921  31.408  50.626  1.00 33.74           N
ATOM   6577  CA   GLU B 423     11.866  31.200  51.608  1.00 32.66           C
ATOM   6578  C    GLU B 423     10.888  30.178  51.051  1.00 33.14           C
ATOM   6579  O    GLU B 423     10.392  29.319  51.776  1.00 31.87           O
ATOM   6580  CB   GLU B 423     11.141  32.514  51.918  1.00 30.37           C
ATOM   6581  CG   GLU B 423      9.956  32.353  52.873  1.00 28.81           C
ATOM   6582  CD   GLU B 423      9.545  33.662  53.528  1.00 27.73           C
ATOM   6583  OE1  GLU B 423     10.351  34.205  54.309  1.00 23.79           O
ATOM   6584  OE2  GLU B 423      8.422  34.145  53.262  1.00 25.77           O
ATOM   6585  N    GLU B 424     10.622  30.274  49.754  1.00 34.09           N
ATOM   6586  CA   GLU B 424      9.714  29.347  49.097  1.00 37.90           C
ATOM   6587  C    GLU B 424     10.283  27.926  49.084  1.00 38.15           C
ATOM   6588  O    GLU B 424      9.551  26.965  49.317  1.00 38.30           O
ATOM   6589  CB   GLU B 424      9.424  29.815  47.660  1.00 39.19           C
ATOM   6590  CG   GLU B 424      8.771  28.758  46.759  1.00 42.89           C
ATOM   6591  CD   GLU B 424      8.370  29.299  45.387  1.00 44.11           C
ATOM   6592  OE1  GLU B 424      7.299  29.932  45.278  1.00 44.49           O
ATOM   6593  OE2  GLU B 424      9.133  29.098  44.418  1.00 43.30           O
ATOM   6594  N    GLY B 425     11.588  27.803  48.835  1.00 38.92           N
ATOM   6595  CA   GLY B 425     12.218  26.493  48.776  1.00 40.32           C
ATOM   6596  C    GLY B 425     13.047  25.998  49.956  1.00 40.67           C
ATOM   6597  O    GLY B 425     13.810  25.048  49.800  1.00 42.02           O
ATOM   6598  N    GLN B 426     12.918  26.613  51.127  1.00 40.39           N
ATOM   6599  CA   GLN B 426     13.680  26.170  52.298  1.00 39.65           C
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| ATOM | 6600 | C   | GLN B 426 | 12.869  | 26.232 | 53.590 | 1.00 39.72 | C |
| ATOM | 6601 | O   | GLN B 426 | 13.282  | 25.700 | 54.621 | 1.00 38.88 | O |
| ATOM | 6602 | CB  | GLN B 426 | 14.949  | 27.003 | 52.470 | 1.00 39.21 | C |
| ATOM | 6603 | CG  | GLN B 426 | 16.064  | 26.686 | 51.493 | 1.00 40.62 | C |
| ATOM | 6604 | CD  | GLN B 426 | 17.327  | 27.469 | 51.799 | 1.00 42.07 | C |
| ATOM | 6605 | OE1 | GLN B 426 | 17.758  | 27.538 | 52.956 | 1.00 41.09 | O |
| ATOM | 6606 | NE2 | GLN B 426 | 17.933  | 28.060 | 50.768 | 1.00 40.39 | N |
| ATOM | 6607 | N   | PHE B 427 | 11.715  | 26.887 | 53.528 | 1.00 40.02 | N |
| ATOM | 6608 | CA  | PHE B 427 | 10.841  | 27.022 | 54.688 | 1.00 40.46 | C |
| ATOM | 6609 | C   | PHE B 427 | 9.473   | 26.382 | 54.434 | 1.00 41.86 | C |
| ATOM | 6610 | O   | PHE B 427 | 9.044   | 25.554 | 55.269 | 1.00 42.54 | O |
| ATOM | 6611 | CB  | PHE B 427 | 10.670  | 28.504 | 55.049 | 1.00 37.32 | C |
| ATOM | 6612 | CG  | PHE B 427 | 11.923  | 29.147 | 55.588 | 1.00 34.23 | C |
| ATOM | 6613 | CD1 | PHE B 427 | 13.070  | 29.233 | 54.808 | 1.00 33.14 | C |
| ATOM | 6614 | CD2 | PHE B 427 | 11.956  | 29.653 | 56.882 | 1.00 32.30 | C |
| ATOM | 6615 | CE1 | PHE B 427 | 14.232  | 29.811 | 55.306 | 1.00 32.63 | C |
| ATOM | 6616 | CE2 | PHE B 427 | 13.111  | 30.234 | 57.392 | 1.00 31.91 | C |
| ATOM | 6617 | CZ  | PHE B 427 | 14.253  | 30.313 | 56.602 | 1.00 32.87 | C |
| TER  | 6618 |     | PHE B 427 |         |        |        |            |   |
| ATOM | 6619 | N   | ALA C 1   | -13.737 | 44.354 | 66.544 | 1.00 50.11 | N |
| ATOM | 6620 | CA  | ALA C 1   | -15.164 | 44.158 | 66.158 | 1.00 50.22 | C |
| ATOM | 6621 | C   | ALA C 1   | -15.858 | 45.499 | 65.934 | 1.00 49.76 | C |
| ATOM | 6622 | O   | ALA C 1   | -16.472 | 46.049 | 66.851 | 1.00 50.81 | O |
| ATOM | 6623 | CB  | ALA C 1   | -15.895 | 43.366 | 67.245 | 1.00 50.96 | C |
| ATOM | 6624 | N   | SER C 2   | -15.753 | 46.023 | 64.715 | 1.00 48.45 | N |
| ATOM | 6625 | CA  | SER C 2   | -16.383 | 47.298 | 64.368 | 1.00 47.05 | C |
| ATOM | 6626 | C   | SER C 2   | -16.711 | 47.352 | 62.878 | 1.00 45.83 | C |
| ATOM | 6627 | O   | SER C 2   | -16.056 | 46.695 | 62.065 | 1.00 46.88 | O |
| ATOM | 6628 | CB  | SER C 2   | -15.461 | 48.466 | 64.728 | 1.00 46.75 | C |
| ATOM | 6629 | OG  | SER C 2   | -16.107 | 49.711 | 64.519 | 1.00 45.54 | O |
| ATOM | 6630 | N   | VAL C 3   | -17.723 | 48.136 | 62.523 | 1.00 43.31 | N |
| ATOM | 6631 | CA  | VAL C 3   | -18.117 | 48.269 | 61.126 | 1.00 41.74 | C |
| ATOM | 6632 | C   | VAL C 3   | -17.487 | 49.498 | 60.482 | 1.00 39.45 | C |
| ATOM | 6633 | O   | VAL C 3   | -17.607 | 49.707 | 59.275 | 1.00 39.00 | O |
| ATOM | 6634 | CB  | VAL C 3   | -19.649 | 48.371 | 60.980 | 1.00 42.37 | C |
| ATOM | 6635 | CG1 | VAL C 3   | -20.304 | 47.121 | 61.537 | 1.00 43.35 | C |
| ATOM | 6636 | CG2 | VAL C 3   | -20.159 | 49.608 | 61.693 | 1.00 42.46 | C |
| ATOM | 6637 | N   | VAL C 4   | -16.822 | 50.312 | 61.297 | 1.00 37.10 | N |
| ATOM | 6638 | CA  | VAL C 4   | -16.165 | 51.521 | 60.808 | 1.00 33.48 | C |
| ATOM | 6639 | C   | VAL C 4   | -15.077 | 51.132 | 59.810 | 1.00 31.84 | C |
| ATOM | 6640 | O   | VAL C 4   | -14.206 | 50.320 | 60.118 | 1.00 30.05 | O |
| ATOM | 6641 | CB  | VAL C 4   | -15.520 | 52.313 | 61.973 | 1.00 33.43 | C |
| ATOM | 6642 | CG1 | VAL C 4   | -14.856 | 53.575 | 61.453 | 1.00 30.67 | C |
| ATOM | 6643 | CG2 | VAL C 4   | -16.573 | 52.657 | 63.007 | 1.00 33.62 | C |
| ATOM | 6644 | N   | GLY C 5   | -15.143 | 51.704 | 58.613 | 1.00 30.90 | N |
| ATOM | 6645 | CA  | GLY C 5   | -14.152 | 51.409 | 57.594 | 1.00 30.44 | C |
| ATOM | 6646 | C   | GLY C 5   | -14.298 | 50.085 | 56.855 | 1.00 30.80 | C |
| ATOM | 6647 | O   | GLY C 5   | -13.395 | 49.685 | 56.117 | 1.00 28.96 | O |
| ATOM | 6648 | N   | THR C 6   | -15.423 | 49.400 | 57.036 | 1.00 30.68 | N |
| ATOM | 6649 | CA  | THR C 6   | -15.634 | 48.121 | 56.359 | 1.00 30.97 | C |
| ATOM | 6650 | C   | THR C 6   | -15.540 | 48.315 | 54.842 | 1.00 29.45 | C |
| ATOM | 6651 | O   | THR C 6   | -16.184 | 49.194 | 54.278 | 1.00 28.89 | O |
| ATOM | 6652 | CB  | THR C 6   | -17.018 | 47.527 | 56.709 | 1.00 32.32 | C |
| ATOM | 6653 | OG1 | THR C 6   | -17.130 | 47.376 | 58.131 | 1.00 33.84 | O |
| ATOM | 6654 | CG2 | THR C 6   | -17.195 | 46.168 | 56.047 | 1.00 32.86 | C |
| ATOM | 6655 | N   | PRO C 7   | -14.733 | 47.488 | 54.164 | 1.00 29.74 | N |
| ATOM | 6656 | CA  | PRO C 7   | -14.544 | 47.565 | 52.710 | 1.00 29.17 | C |
| ATOM | 6657 | C   | PRO C 7   | -15.823 | 47.346 | 51.897 | 1.00 29.19 | C |
| ATOM | 6658 | O   | PRO C 7   | -16.710 | 46.611 | 52.319 | 1.00 28.72 | O |
| ATOM | 6659 | CB  | PRO C 7   | -13.520 | 46.464 | 52.437 | 1.00 29.99 | C |
| ATOM | 6660 | CG  | PRO C 7   | -12.793 | 46.317 | 53.746 | 1.00 29.09 | C |
| ATOM | 6661 | CD  | PRO C 7   | -13.903 | 46.418 | 54.743 | 1.00 29.92 | C |
| ATOM | 6662 | N   | LYS C 8   | -15.911 | 47.983 | 50.730 | 1.00 28.99 | N |
| ATOM | 6663 | CA  | LYS C 8   | -17.072 | 47.809 | 49.853 | 1.00 28.53 | C |
| ATOM | 6664 | C   | LYS C 8   | -16.913 | 46.454 | 49.169 | 1.00 27.86 | C |
| ATOM | 6665 | O   | LYS C 8   | -15.810 | 45.916 | 49.084 | 1.00 26.53 | O |
| ATOM | 6666 | CB  | LYS C 8   | -17.124 | 48.888 | 48.765 | 1.00 26.22 | C |
| ATOM | 6667 | CG  | LYS C 8   | -17.362 | 50.310 | 49.240 | 1.00 27.27 | C |
| ATOM | 6668 | CD  | LYS C 8   | -17.257 | 51.280 | 48.061 | 1.00 27.44 | C |
| ATOM | 6669 | CE  | LYS C 8   | -17.323 | 52.726 | 48.518 | 1.00 29.54 | C |
| ATOM | 6670 | NZ  | LYS C 8   | -17.049 | 53.682 | 47.410 | 1.00 28.29 | N |
| ATOM | 6671 | N   | SER C 9   | -18.010 | 45.903 | 48.673 | 1.00 27.71 | N |
| ATOM | 6672 | CA  | SER C 9   | -17.940 | 44.620 | 47.993 | 1.00 28.50 | C |
| ATOM | 6673 | C   | SER C 9   | -17.452 | 44.866 | 46.572 | 1.00 27.41 | C |
| ATOM | 6674 | O   | SER C 9   | -17.490 | 45.990 | 46.083 | 1.00 25.19 | O |
| ATOM | 6675 | CB  | SER C 9   | -19.319 | 43.969 | 47.937 | 1.00 30.13 | C |
| ATOM | 6676 | OG  | SER C 9   | -20.168 | 44.687 | 47.053 | 1.00 30.52 | O |
| ATOM | 6677 | N   | ALA C 10  | -16.998 | 43.806 | 45.913 | 1.00 28.55 | N |
| ATOM | 6678 | CA  | ALA C 10  | -16.527 | 43.908 | 44.540 | 1.00 30.02 | C |
| ATOM | 6679 | C   | ALA C 10  | -17.681 | 44.373 | 43.645 | 1.00 30.72 | C |

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ATOM   6680  O   ALA C  10   -17.475  45.132  42.696  1.00 31.08        O
ATOM   6681  CB  ALA C  10   -16.005  42.557  44.067  1.00 29.25        C
ATOM   6682  N   GLU C  11   -18.891  43.914  43.957  1.00 31.21        N
ATOM   6683  CA  GLU C  11   -20.076  44.286  43.190  1.00 32.41        C
ATOM   6684  C   GLU C  11   -20.328  45.788  43.252  1.00 31.01        C
ATOM   6685  O   GLU C  11   -20.561  46.423  42.226  1.00 30.67        O
ATOM   6686  CB  GLU C  11   -21.315  43.552  43.713  1.00 35.26        C
ATOM   6687  CG  GLU C  11   -21.312  42.036  43.521  1.00 39.51        C
ATOM   6688  CD  GLU C  11   -20.287  41.313  44.390  1.00 42.47        C
ATOM   6689  OE1 GLU C  11   -20.184  41.624  45.597  1.00 44.31        O
ATOM   6690  OE2 GLU C  11   -19.594  40.416  43.866  1.00 44.39        O
ATOM   6691  N   GLN C  12   -20.293  46.352  44.456  1.00 30.79        N
ATOM   6692  CA  GLN C  12   -20.519  47.786  44.625  1.00 32.00        C
ATOM   6693  C   GLN C  12   -19.509  48.585  43.807  1.00 31.44        C
ATOM   6694  O   GLN C  12   -19.865  49.567  43.152  1.00 31.97        O
ATOM   6695  CB  GLN C  12   -20.382  48.191  46.093  1.00 34.71        C
ATOM   6696  CG  GLN C  12   -21.410  47.593  47.035  1.00 37.78        C
ATOM   6697  CD  GLN C  12   -21.115  47.944  48.483  1.00 39.46        C
ATOM   6698  OE1 GLN C  12   -21.089  49.119  48.856  1.00 39.19        O
ATOM   6699  NE2 GLN C  12   -20.882  46.923  49.304  1.00 40.82        N
ATOM   6700  N   ILE C  13   -18.247  48.161  43.860  1.00 29.29        N
ATOM   6701  CA  ILE C  13   -17.175  48.834  43.130  1.00 29.30        C
ATOM   6702  C   ILE C  13   -17.426  48.747  41.628  1.00 28.53        C
ATOM   6703  O   ILE C  13   -17.380  49.756  40.921  1.00 27.84        O
ATOM   6704  CB  ILE C  13   -15.795  48.204  43.460  1.00 29.95        C
ATOM   6705  CG1 ILE C  13   -15.468  48.417  44.941  1.00 28.47        C
ATOM   6706  CG2 ILE C  13   -14.715  48.824  42.591  1.00 28.51        C
ATOM   6707  CD1 ILE C  13   -14.201  47.737  45.396  1.00 30.77        C
ATOM   6708  N   GLN C  14   -17.702  47.540  41.146  1.00 28.18        N
ATOM   6709  CA  GLN C  14   -17.974  47.333  39.729  1.00 30.89        C
ATOM   6710  C   GLN C  14   -19.130  48.224  39.262  1.00 32.40        C
ATOM   6711  O   GLN C  14   -19.077  48.806  38.178  1.00 30.54        O
ATOM   6712  CB  GLN C  14   -18.320  45.869  39.463  1.00 30.83        C
ATOM   6713  CG  GLN C  14   -18.477  45.546  37.994  1.00 29.66        C
ATOM   6714  CD  GLN C  14   -17.205  45.808  37.209  1.00 31.82        C
ATOM   6715  OE1 GLN C  14   -16.152  45.240  37.505  1.00 31.31        O
ATOM   6716  NE2 GLN C  14   -17.294  46.673  36.204  1.00 30.96        N
ATOM   6717  N   GLN C  15   -20.171  48.324  40.084  1.00 33.94        N
ATOM   6718  CA  GLN C  15   -21.319  49.154  39.749  1.00 36.69        C
ATOM   6719  C   GLN C  15   -20.908  50.609  39.580  1.00 36.48        C
ATOM   6720  O   GLN C  15   -21.369  51.284  38.661  1.00 36.54        O
ATOM   6721  CB  GLN C  15   -22.389  49.062  40.835  1.00 39.78        C
ATOM   6722  CG  GLN C  15   -23.476  50.106  40.679  1.00 43.92        C
ATOM   6723  CD  GLN C  15   -24.489  50.047  41.792  1.00 47.87        C
ATOM   6724  OE1 GLN C  15   -25.211  49.059  41.935  1.00 49.87        O
ATOM   6725  NE2 GLN C  15   -24.546  51.104  42.598  1.00 49.17        N
ATOM   6726  N   GLU C  16   -20.053  51.096  40.478  1.00 36.37        N
ATOM   6727  CA  GLU C  16   -19.594  52.477  40.396  1.00 35.79        C
ATOM   6728  C   GLU C  16   -18.859  52.678  39.075  1.00 33.88        C
ATOM   6729  O   GLU C  16   -19.053  53.681  38.390  1.00 34.61        O
ATOM   6730  CB  GLU C  16   -18.659  52.807  41.568  1.00 37.27        C
ATOM   6731  CG  GLU C  16   -19.342  52.871  42.927  1.00 41.97        C
ATOM   6732  CD  GLU C  16   -18.359  53.110  44.072  1.00 44.79        C
ATOM   6733  OE1 GLU C  16   -17.565  54.072  43.999  1.00 46.74        O
ATOM   6734  OE2 GLU C  16   -18.383  52.337  45.051  1.00 45.77        O
ATOM   6735  N   TRP C  17   -18.021  51.710  38.718  1.00 32.46        N
ATOM   6736  CA  TRP C  17   -17.250  51.785  37.483  1.00 32.04        C
ATOM   6737  C   TRP C  17   -18.136  51.744  36.249  1.00 32.54        C
ATOM   6738  O   TRP C  17   -17.786  52.289  35.203  1.00 30.70        O
ATOM   6739  CB  TRP C  17   -16.248  50.636  37.403  1.00 30.25        C
ATOM   6740  CG  TRP C  17   -15.159  50.694  38.425  1.00 30.85        C
ATOM   6741  CD1 TRP C  17   -14.889  51.721  39.289  1.00 30.04        C
ATOM   6742  CD2 TRP C  17   -14.166  49.695  38.666  1.00 28.35        C
ATOM   6743  NE1 TRP C  17   -13.786  51.418  40.050  1.00 30.03        N
ATOM   6744  CE2 TRP C  17   -13.323  50.181  39.688  1.00 27.76        C
ATOM   6745  CE3 TRP C  17   -13.904  48.433  38.114  1.00 28.19        C
ATOM   6746  CZ2 TRP C  17   -12.237  49.452  40.170  1.00 27.34        C
ATOM   6747  CZ3 TRP C  17   -12.823  47.708  38.595  1.00 28.42        C
ATOM   6748  CH2 TRP C  17   -12.003  48.221  39.614  1.00 26.56        C
ATOM   6749  N   ASP C  18   -19.287  51.098  36.374  1.00 32.82        N
ATOM   6750  CA  ASP C  18   -20.200  50.987  35.250  1.00 33.99        C
ATOM   6751  C   ASP C  18   -21.194  52.136  35.115  1.00 34.16        C
ATOM   6752  O   ASP C  18   -21.612  52.464  34.007  1.00 34.32        O
ATOM   6753  CB  ASP C  18   -20.979  49.675  35.338  1.00 33.55        C
ATOM   6754  CG  ASP C  18   -20.078  48.465  35.326  1.00 36.17        C
ATOM   6755  OD1 ASP C  18   -18.939  48.576  34.821  1.00 38.03        O
ATOM   6756  OD2 ASP C  18   -20.514  47.398  35.810  1.00 36.37        O
ATOM   6757  N   THR C  19   -21.562  52.751  36.235  1.00 33.92        N
ATOM   6758  CA  THR C  19   -22.554  53.818  36.217  1.00 33.74        C
ATOM   6759  C   THR C  19   -22.072  55.238  36.460  1.00 33.66        C
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| ATOM | 6760 | O | THR | C | 19 | -22.710 | 56.184 | 36.008 | 1.00 | 33.98 | O |
|------|------|------|------|------|------|------|------|------|------|------|------|
| ATOM | 6761 | CB | THR | C | 19 | -23.663 | 53.529 | 37..233 | 1.00 | 35.15 | C |
| ATOM | 6762 | OG1 | THR | C | 19 | -23.091 | 53.430 | 38.543 | 1.00 | 36.05 | O |
| ATOM | 6763 | CG2 | THR | C | 19 | -24.364 | 52.219 | 36.894 | 1.00 | 35.43 | C |
| ATOM | 6764 | N | ASN | C | 20 | -20.970 | 55.407 | 37.180 | 1.00 | 33.00 | N |
| ATOM | 6765 | CA | ASN | C | 20 | -20.483 | 56.756 | 37.438 | 1.00 | 32.33 | C |
| ATOM | 6766 | C | ASN | C | 20 | -19.802 | 57.333 | 36.196 | 1.00 | 31.17 | C |
| ATOM | 6767 | O | ASN | C | 20 | -18.908 | 56.709 | 35.627 | 1.00 | 30.65 | O |
| ATOM | 6768 | CB | ASN | C | 20 | -19.500 | 56.761 | 38.607 | 1.00 | 32.54 | C |
| ATOM | 6769 | CG | ASN | C | 20 | -19.266 | 58.157 | 39.154 | 1.00 | 33.63 | C |
| ATOM | 6770 | OD1 | ASN | C | 20 | -19.192 | 59.129 | 38.397 | 1.00 | 32.24 | O |
| ATOM | 6771 | ND2 | ASN | C | 20 | -19.139 | 58.263 | 40.471 | 1.00 | 32.85 | N |
| ATOM | 6772 | N | PRO | C | 21 | -20.233 | 58.526 | 35.750 | 1.00 | 30.27 | N |
| ATOM | 6773 | CA | PRO | C | 21 | -19.673 | 59.204 | 34.573 | 1.00 | 29.50 | C |
| ATOM | 6774 | C | PRO | C | 21 | -18.180 | 59.495 | 34.732 | 1.00 | 28.77 | C |
| ATOM | 6775 | O | PRO | C | 21 | -17.459 | 59.676 | 33.748 | 1.00 | 28.26 | O |
| ATOM | 6776 | CB | PRO | C | 21 | -20.496 | 60.489 | 34.485 | 1.00 | 28.84 | C |
| ATOM | 6777 | CG | PRO | C | 21 | -21.809 | 60.078 | 35.039 | 1.00 | 31.89 | C |
| ATOM | 6778 | CD | PRO | C | 21 | -21.420 | 59.247 | 36.244 | 1.00 | 31.38 | C |
| ATOM | 6779 | N | ARG | C | 22 | -17.727 | 59.543 | 35.980 | 1.00 | 27.90 | N |
| ATOM | 6780 | CA | ARG | C | 22 | -16.323 | 59.802 | 36.276 | 1.00 | 26.19 | C |
| ATOM | 6781 | C | ARG | C | 22 | -15.451 | 58.796 | 35.543 | 1.00 | 25.62 | C |
| ATOM | 6782 | O | ARG | C | 22 | -14.412 | 59.144 | 34.996 | 1.00 | 26.25 | O |
| ATOM | 6783 | CB | ARG | C | 22 | -16.072 | 59.688 | 37.784 | 1.00 | 24.98 | C |
| ATOM | 6784 | CG | ARG | C | 22 | -14.605 | 59.775 | 38.188 | 1.00 | 25.20 | C |
| ATOM | 6785 | CD | ARG | C | 22 | -14.036 | 61.163 | 37.939 | 1:00 | 22.41 | C |
| ATOM | 6786 | NE | ARG | C | 22 | -12.625 | 61.252 | 38.301 | 1.00 | 22.74 | N |
| ATOM | 6787 | CZ | ARG | C | 22 | -11.624 | 60.790 | 37.555 | 1.00 | 24.34 | C |
| ATOM | 6788 | NH1 | ARG | C | 22 | -11.870 | 60.197 | 36.388 | 1.00 | 20.56 | N |
| ATOM | 6789 | NH2 | ARG | C | 22 | -10.372 | 60.928 | 37.974 | 1.00 | 20.67 | N |
| ATOM | 6790 | N | TRP | C | 23 | -15.902 | 57.549 | 35.517 | 1.00 | 26.56 | N |
| ATOM | 6791 | CA | TRP | C | 23 | -15.163 | 56.462 | 34.884 | 1.00 | 27.30 | C |
| ATOM | 6792 | C | TRP | C | 23 | -15.564 | 56.184 | 33.441 | 1.00 | 28.55 | C |
| ATOM | 6793 | O | TRP | C | 23 | -15.191 | 55.159 | 32.875 | 1.00 | 27.29 | O |
| ATOM | 6794 | CB | TRP | C | 23 | -15.341 | 55.204 | 35.722 | 1.00 | 25.36 | C |
| ATOM | 6795 | CG | TRP | C | 23 | -15.129 | 55.477 | 37.171 | 1.00 | 25.34 | C |
| ATOM | 6796 | CD1 | TRP | C | 23 | -16.012 | 55.266 | 38.182 | 1.00 | 25.29 | C |
| ATOM | 6797 | CD2 | TRP | C | 23 | -13.954 | 56.029 | 37.772 | 1.00 | 25.33 | C |
| ATOM | 6798 | NE1 | TRP | C | 23 | -15.463 | 55.649 | 39.380 | 1.00 | 24.36 | N |
| ATOM | 6799 | CE2 | TRP | C | 23 | -14.198 | 56.122 | 39.155 | 1.00 | 25.75 | C |
| ATOM | 6800 | CE3 | TRP | C | 23 | -12.717 | 56.452 | 37.274 | 1.00 | 25.19 | C |
| ATOM | 6801 | CZ2 | TRP | C | 23 | -13.246 | 56.623 | 40.052 | 1.00 | 26.72 | C |
| ATOM | 6802 | CZ3 | TRP | C | 23 | -11.773 | 56.950 | 38.167 | 1.00 | 25.11 | C |
| ATOM | 6803 | CH2 | TRP | C | 23 | -12.044 | 57.030 | 39.536 | 1.00 | 23.85 | C |
| ATOM | 6804 | N | LYS | C | 24 | -16.315 | 57.160 | 32.851 | 1.00 | 31.01 | N |
| ATOM | 6805 | CA | LYS | C | 24 | -16.781 | 56.966 | 31.476 | 1.00 | 33.59 | C |
| ATOM | 6806 | C | LYS | C | 24 | -15.706 | 56.510 | 30.482 | 1.00 | 33.64 | C |
| ATOM | 6807 | O | LYS | C | 24 | -15.917 | 55.562 | 29.724 | 1.00 | 33.50 | O |
| ATOM | 6808 | CB | LYS | C | 24 | -17.380 | 58.294 | 30.996 | 1.00 | 35.49 | C |
| ATOM | 6809 | CG | LYS | C | 24 | -17.918 | 58.247 | 29.576 | 1.00 | 40.57 | C |
| ATOM | 6810 | CD | LYS | C | 24 | -18.337 | 59.626 | 29.074 | 1.00 | 43.99 | C |
| ATOM | 6811 | CE | LYS | C | 24 | -17.140 | 60.564 | 28.985 | 1.00 | 47.04 | C |
| ATOM | 6812 | NZ | LYS | C | 24 | -17.451 | 61.850 | 28.299 | 1.00 | 48.16 | N |
| ATOM | 6813 | N | ASP | C | 25 | -14.558 | 57.181 | 30.483 | 1.00 | 32.97 | N |
| ATOM | 6814 | CA | ASP | C | 25 | -13.482 | 56.849 | 29.548 | 1.00 | 34.01 | C |
| ATOM | 6815 | C | ASP | C | 25 | -12.269 | 56.211 | 30.219 | 1.00 | 32.95 | C |
| ATOM | 6816 | O | ASP | C | 25 | -11.160 | 56.254 | 29.686 | 1.00 | 31.85 | O |
| ATOM | 6817 | CB | ASP | C | 25 | -13.031 | 58.115 | 28.815 | 1.00 | 35.54 | C |
| ATOM | 6818 | CG | ASP | C | 25 | -14.180 | 58.849 | 28.155 | 1.00 | 36.10 | C |
| ATOM | 6819 | OD1 | ASP | C | 25 | -14.827 | 58.254 | 27.267 | 1.00 | 38.03 | O |
| ATOM | 6820 | OD2 | ASP | C | 25 | -14.432 | 60.017 | 28.525 | 1.00 | 34.10 | O |
| ATOM | 6821 | N | VAL | C | 26 | -12.481 | 55.612 | 31.383 | 1.00 | 31.47 | N |
| ATOM | 6822 | CA | VAL | C | 26 | -11.389 | 55.000 | 32.114 | 1.00 | 29.49 | C |
| ATOM | 6823 | C | VAL | C | 26 | -11.285 | 53.493 | 31.922 | 1.00 | 28.54 | C |
| ATOM | 6824 | O | VAL | C | 26 | -12.213 | 52.748 | 32.220 | 1.00 | 28.81 | O |
| ATOM | 6825 | CB | VAL | C | 26 | -11.513 | 55.311 | 33.615 | 1.00 | 29.88 | C |
| ATOM | 6826 | CG1 | VAL | C | 26 | -10.358 | 54.679 | 34.381 | 1.00 | 27.59 | C |
| ATOM | 6827 | CG2 | VAL | C | 26 | -11.534 | 56.825 | 33.823 | 1.00 | 28.43 | C |
| ATOM | 6828 | N | THR | C | 27 | -10.138 | 53.053 | 31.418 | 1.00 | 27.51 | N |
| ATOM | 6829 | CA | THR | C | 27 | -9.886 | 51.639 | 31.209 | 1.00 | 27.49 | C |
| ATOM | 6830 | C | THR | C | 27 | -9.081 | 51.098 | 32.386 | 1.00 | 27.32 | C |
| ATOM | 6831 | O | THR | C | 27 | -8.071 | 51.678 | 32.774 | 1.00 | 26.94 | O |
| ATOM | 6832 | CB | THR | C | 27 | -9.068 | 51.393 | 29.925 | 1.00 | 28.06 | C |
| ATOM | 6833 | OG1 | THR | C | 27 | -9.843 | 51.757 | 28.775 | 1.00 | 29.72 | O |
| ATOM | 6834 | CG2 | THR | C | 27 | -8.661 | 49.927 | 29.827 | 1.00 | 27.47 | C |
| ATOM | 6835 | N | ARG | C | 28 | -9.542 | 49.987 | 32.952 | 1.00 | 27.24 | N |
| ATOM | 6836 | CA | ARG | C | 28 | -8.871 | 49.332 | 34.070 | 1.00 | 24.05 | C |
| ATOM | 6837 | C | ARG | C | 28 | -8.562 | 47.894 | 33.638 | 1.00 | 23.78 | C |
| ATOM | 6838 | O | ARG | C | 28 | -9.475 | 47.108 | 33.395 | 1.00 | 24.37 | O |
| ATOM | 6839 | CB | ARG | C | 28 | -9.783 | 49.322 | 35.309 | 1.00 | 23.24 | C |

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ATOM   6840  CG   ARG C   28      -9.987  50.688  36.005  1.00 23.30           C
ATOM   6841  CD   ARG C   28     -10.866  50.534  37.259  1.00 20.01           C
ATOM   6842  NE   ARG C   28     -10.887  51.701  38.153  1.00 18.72           N
ATOM   6843  CZ   ARG C   28     -11.649  52.782  37.989  1.00 21.11           C
ATOM   6844  NH1  ARG C   28     -12.474  52.876  36.954  1.00 22.02           N
ATOM   6845  NH2  ARG C   28     -11.598  53.773  38.870  1.00 19.55           N
ATOM   6846  N    THR C   29      -7.283  47.542  33.532  1.00 23.98           N
ATOM   6847  CA   THR C   29      -6.925  46.184  33.131  1.00 23.10           C
ATOM   6848  C    THR C   29      -6.989  45.138  34.256  1.00 22.81           C
ATOM   6849  O    THR C   29      -6.661  43.976  34.040  1.00 23.37           O
ATOM   6850  CB   THR C   29      -5.527  46.139  32.459  1.00 23.81           C
ATOM   6851  OG1  THR C   29      -4.547  46.719  33.325  1.00 22.49           O
ATOM   6852  CG2  THR C   29      -5.551  46.904  31.143  1.00 23.18           C
ATOM   6853  N    TYR C   30      -7.409  45.550  35.451  1.00 22.91           N
ATOM   6854  CA   TYR C   30      -7.556  44.631  36.584  1.00 21.15           C
ATOM   6855  C    TYR C   30      -9.033  44.670  36.960  1.00 21.73           C
ATOM   6856  O    TYR C   30      -9.770  45.506  36.439  1.00 21.51           O
ATOM   6857  CB   TYR C   30      -6.673  45.071  37.764  1.00 20.80           C
ATOM   6858  CG   TYR C   30      -6.790  46.535  38.117  1.00 19.62           C
ATOM   6859  CD1  TYR C   30      -7.876  47.013  38.846  1.00 19.90           C
ATOM   6860  CD2  TYR C   30      -5.841  47.450  37.673  1.00 19.65           C
ATOM   6861  CE1  TYR C   30      -8.020  48.373  39.122  1.00 20.14           C
ATOM   6862  CE2  TYR C   30      -5.973  48.810  37.939  1.00 22.09           C
ATOM   6863  CZ   TYR C   30      -7.068  49.265  38.663  1.00 20.90           C
ATOM   6864  OH   TYR C   30      -7.220  50.610  38.904  1.00 17.95           O
ATOM   6865  N    SER C   31      -9.475  43.781  37.847  1.00 22.24           N
ATOM   6866  CA   SER C   31     -10.892  43.745  38.234  1.00 22.24           C
ATOM   6867  C    SER C   31     -11.183  44.355  39.597  1.00 21.29           C
ATOM   6868  O    SER C   31     -10.271  44.705  40.344  1.00 21.88           O
ATOM   6869  CB   SER C   31     -11.409  42.303  38.231  1.00 21.91           C
ATOM   6870  OG   SER C   31     -10.799  41.559  39.265  1.00 23.49           O
ATOM   6871  N    ALA C   32     -12.469  44.476  39.913  1.00 20.49           N
ATOM   6872  CA   ALA C   32     -12.897  45.031  41.192  1.00 20.98           C
ATOM   6873  C    ALA C   32     -12.487  44.072  42.297  1.00 22.48           C
ATOM   6874  O    ALA C   32     -12.167  44.484  43.409  1.00 22.96           O
ATOM   6875  CB   ALA C   32     -14.415  45.225  41.202  1.00 21.49           C
ATOM   6876  N    GLU C   33     -12.511  42.784  41.977  1.00 23.99           N
ATOM   6877  CA   GLU C   33     -12.136  41.741  42.923  1.00 26.03           C
ATOM   6878  C    GLU C   33     -10.669  41.917  43.318  1.00 25.21           C
ATOM   6879  O    GLU C   33     -10.307  41.711  44.475  1.00 22.97           O
ATOM   6880  CB   GLU C   33     -12.345  40.356  42.294  1.00 29.95           C
ATOM   6881  CG   GLU C   33     -13.788  40.057  41.877  1.00 37.95           C
ATOM   6882  CD   GLU C   33     -14.335  41.054  40.849  1.00 42.82           C
ATOM   6883  OE1  GLU C   33     -13.792  41.127  39.720  1.00 41.53           O
ATOM   6884  OE2  GLU C   33     -15.310  41.769  41.177  1.00 46.29           O
ATOM   6885  N    ASP C   34      -9.827  42.288  42.353  1.00 24.24           N
ATOM   6886  CA   ASP C   34      -8.411  42.504  42.637  1.00 24.96           C
ATOM   6887  C    ASP C   34      -8.251  43.652  43.626  1.00 24.22           C
ATOM   6888  O    ASP C   34      -7.393  43.607  44.501  1.00 25.85           O
ATOM   6889  CB   ASP C   34      -7.633  42.845  41.365  1.00 25.79           C
ATOM   6890  CG   ASP C   34      -7.558  41.689  40.396  1.00 26.76           C
ATOM   6891  OD1  ASP C   34      -7.475  40.531  40.861  1.00 26.59           O
ATOM   6892  OD2  ASP C   34      -7.564  41.942  39.170  1.00 26.77           O
ATOM   6893  N    VAL C   35      -9.077  44.683  43.481  1.00 21.98           N
ATOM   6894  CA   VAL C   35      -9.013  45.836  44.370  1.00 21.49           C
ATOM   6895  C    VAL C   35      -9.388  45.415  45.782  1.00 21.70           C
ATOM   6896  O    VAL C   35      -8.637  45.648  46.737  1.00 21.15           O
ATOM   6897  CB   VAL C   35      -9.972  46.961  43.912  1.00 18.02           C
ATOM   6898  CG1  VAL C   35      -9.954  48.102  44.911  1.00 16.06           C
ATOM   6899  CG2  VAL C   35      -9.563  47.458  42.541  1.00 16.48           C
ATOM   6900  N    VAL C   36     -10.557  44.796  45.907  1.00 21.04           N
ATOM   6901  CA   VAL C   36     -11.039  44.334  47.198  1.00 20.56           C
ATOM   6902  C    VAL C   36     -10.003  43.450  47.894  1.00 19.70           C
ATOM   6903  O    VAL C   36      -9.800  43.559  49.097  1.00 20.70           O
ATOM   6904  CB   VAL C   36     -12.360  43.558  47.041  1.00 19.09           C
ATOM   6905  CG1  VAL C   36     -12.720  42.858  48.340  1.00 20.19           C
ATOM   6906  CG2  VAL C   36     -13.465  44.517  46.651  1.00 18.47           C
ATOM   6907  N    ALA C   37      -9.341  42.594  47.127  1.00 18.98           N
ATOM   6908  CA   ALA C   37      -8.330  41.686  47.662  1.00 20.56           C
ATOM   6909  C    ALA C   37      -7.148  42.397  48.321  1.00 21.63           C
ATOM   6910  O    ALA C   37      -6.434  41.806  49.138  1.00 21.97           O
ATOM   6911  CB   ALA C   37      -7.820  40.771  46.545  1.00 21.28           C
ATOM   6912  N    LEU C   38      -6.947  43.665  47.975  1.00 20.92           N
ATOM   6913  CA   LEU C   38      -5.833  44.434  48.515  1.00 20.31           C
ATOM   6914  C    LEU C   38      -6.218  45.391  49.648  1.00 21.15           C
ATOM   6915  O    LEU C   38      -5.349  46.006  50.262  1.00 20.32           O
ATOM   6916  CB   LEU C   38      -5.161  45.228  47.381  1.00 16.75           C
ATOM   6917  CG   LEU C   38      -4.536  44.422  46.229  1.00 17.54           C
ATOM   6918  CD1  LEU C   38      -4.033  45.367  45.135  1.00 15.42           C
ATOM   6919  CD2  LEU C   38      -3.388  43.575  46.752  1.00 17.07           C
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ATOM   6920  N    GLN C  39      -7.508  45.503  49.942  1.00 21.75           N
ATOM   6921  CA   GLN C  39      -7.963  46.433  50.974  1.00 22.60           C
ATOM   6922  C    GLN C  39      -7.957  45.938  52.424  1.00 23.26           C
ATOM   6923  O    GLN C  39      -8.336  46.678  53.331  1.00 22.58           O
ATOM   6924  CB   GLN C  39      -9.366  46.936  50.623  1.00 22.58           C
ATOM   6925  CG   GLN C  39      -9.441  47.688  49.293  1.00 25.87           C
ATOM   6926  CD   GLN C  39     -10.837  48.209  48.984  1.00 25.93           C
ATOM   6927  OE1  GLN C  39     -11.822  47.466  49.054  1.00 28.42           O
ATOM   6928  NE2  GLN C  39     -10.927  49.487  48.634  1.00 20.55           N
ATOM   6929  N    GLY C  40      -7.517  44.708  52.657  1.00 23.87           N
ATOM   6930  CA   GLY C  40      -7.531  44.207  54.019  1.00 23.54           C
ATOM   6931  C    GLY C  40      -8.977  44.185  54.489  1.00 23.92           C
ATOM   6932  O    GLY C  40      -9.877  43.970  53.681  1.00 23.68           O
ATOM   6933  N    SER C  41      -9.216  44.419  55.776  1.00 23.63           N
ATOM   6934  CA   SER C  41     -10.583  44.407  56.285  1.00 24.31           C
ATOM   6935  C    SER C  41     -11.005  45.777  56.788  1.00 23.87           C
ATOM   6936  O    SER C  41     -12.070  45.938  57.383  1.00 21.87           O
ATOM   6937  CB   SER C  41     -10.736  43.352  57.395  1.00 25.18           C
ATOM   6938  OG   SER C  41      -9.752  43.488  58.396  1.00 23.50           O
ATOM   6939  N    VAL C  42     -10.160  46.766  56.531  1.00 24.01           N
ATOM   6940  CA   VAL C  42     -10.444  48.130  56.940  1.00 23.97           C
ATOM   6941  C    VAL C  42      -9.896  49.113  55.925  1.00 23.60           C
ATOM   6942  O    VAL C  42      -8.722  49.065  55.566  1.00 24.67           O
ATOM   6943  CB   VAL C  42      -9.828  48.461  58.312  1.00 23.93           C
ATOM   6944  CG1  VAL C  42     -10.035  49.934  58.624  1.00 22.83           C
ATOM   6945  CG2  VAL C  42     -10.474  47.608  59.394  1.00 24.51           C
ATOM   6946  N    VAL C  43     -10.756  50.003  55.454  1.00 22.43           N
ATOM   6947  CA   VAL C  43     -10.333  51.000  54.493  1.00 21.51           C
ATOM   6948  C    VAL C  43     -10.393  52.366  55.149  1.00 21.10           C
ATOM   6949  O    VAL C  43     -11.449  52.810  55.599  1.00 20.09           O
ATOM   6950  CB   VAL C  43     -11.230  50.996  53.242  1.00 22.88           C
ATOM   6951  CG1  VAL C  43     -10.889  52.190  52.357  1.00 21.69           C
ATOM   6952  CG2  VAL C  43     -11.039  49.693  52.470  1.00 22.37           C
ATOM   6953  N    GLU C  44      -9.244  53.022  55.226  1.00 20.76           N
ATOM   6954  CA   GLU C  44      -9.186  54.347  55.815  1.00 20.60           C
ATOM   6955  C    GLU C  44      -9.852  55.326  54.866  1.00 21.65           C
ATOM   6956  O    GLU C  44      -9.753  55.196  53.641  1.00 22.19           O
ATOM   6957  CB   GLU C  44      -7.736  54.778  56.042  1.00 18.62           C
ATOM   6958  CG   GLU C  44      -7.082  54.195  57.271  1.00 17.73           C
ATOM   6959  CD   GLU C  44      -5.692  54.759  57.487  1.00 20.16           C
ATOM   6960  OE1  GLU C  44      -4.766  54.368  56.743  1.00 17.93           O
ATOM   6961  OE2  GLU C  44      -5.530  55.611  58.392  1.00 19.69           O
ATOM   6962  N    GLU C  45     -10.541  56.300  55.439  1.00 21.73           N
ATOM   6963  CA   GLU C  45     -11.202  57.324  54.656  1.00 21.55           C
ATOM   6964  C    GLU C  45     -10.177  58.421  54.457  1.00 20.99           C
ATOM   6965  O    GLU C  45      -9.441  58.767  55.380  1.00 22.66           O
ATOM   6966  CB   GLU C  45     -12.419  57.864  55.414  1.00 24.10           C
ATOM   6967  CG   GLU C  45     -13.087  59.100  54.811  1.00 27.32           C
ATOM   6968  CD   GLU C  45     -13.639  58.877  53.415  1.00 30.39           C
ATOM   6969  OE1  GLU C  45     -13.724  57.711  52.975  1.00 33.39           O
ATOM   6970  OE2  GLU C  45     -14.001  59.876  52.756  1.00 32.13           O
ATOM   6971  N    HIS C  46     -10.109  58.949  53.244  1.00 19.28           N
ATOM   6972  CA   HIS C  46      -9.177  60.020  52.938  1.00 18.24           C
ATOM   6973  C    HIS C  46     -10.006  61.216  52.486  1.00 17.35           C
ATOM   6974  O    HIS C  46     -10.082  61.536  51.299  1.00 16.19           O
ATOM   6975  CB   HIS C  46      -8.206  59.567  51.842  1.00 17.71           C
ATOM   6976  CG   HIS C  46      -7.366  58.389  52.236  1.00 16.79           C
ATOM   6977  ND1  HIS C  46      -6.485  58.426  53.296  1.00 15.80           N
ATOM   6978  CD2  HIS C  46      -7.269  57.145  51.709  1.00 16.54           C
ATOM   6979  CE1  HIS C  46      -5.879  57.256  53.402  1.00 17.49           C
ATOM   6980  NE2  HIS C  46      -6.337  56.461  52.451  1.00 15.35           N
ATOM   6981  N    THR C  47     -10.641  61.853  53.462  1.00 17.18           N
ATOM   6982  CA   THR C  47     -11.506  63.009  53.238  1.00 18.03           C
ATOM   6983  C    THR C  47     -10.991  64.057  52.245  1.00 17.01           C
ATOM   6984  O    THR C  47     -11.633  64.322  51.228  1.00 16.25           O
ATOM   6985  CB   THR C  47     -11.816  63.712  54.577  1.00 17.53           C
ATOM   6986  OG1  THR C  47     -12.339  62.754  55.504  1.00 15.65           O
ATOM   6987  CG2  THR C  47     -12.838  64.826  54.375  1.00 18.80           C
ATOM   6988  N    LEU C  48      -9.842  64.655  52.534  1.00 15.22           N
ATOM   6989  CA   LEU C  48      -9.300  65.679  51.647  1.00 16.94           C
ATOM   6990  C    LEU C  48      -9.014  65.181  50.225  1.00 16.89           C
ATOM   6991  O    LEU C  48      -9.296  65.881  49.250  1.00 17.36           O
ATOM   6992  CB   LEU C  48      -8.041  66.295  52.261  1.00 16.98           C
ATOM   6993  CG   LEU C  48      -8.250  66.924  53.648  1.00 20.47           C
ATOM   6994  CD1  LEU C  48      -7.006  67.701  54.060  1.00 19.72           C
ATOM   6995  CD2  LEU C  48      -9.456  67.860  53.619  1.00 19.69           C
ATOM   6996  N    ALA C  49      -8.468  63.975  50.101  1.00 17.63           N
ATOM   6997  CA   ALA C  49      -8.170  63.422  48.781  1.00 18.19           C
ATOM   6998  C    ALA C  49      -9.459  63.202  47.981  1.00 18.91           C
ATOM   6999  O    ALA C  49      -9.489  63.419  46.766  1.00 18.21           O
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| ATOM | 7000 | CB | ALA C | 49 | -7.409 | 62.115 | 48.922 | 1.00 | 15.64 | C |
|------|------|-----|-------|----|--------|--------|--------|------|-------|---|
| ATOM | 7001 | N | ARG C | 50 | -10.523 | 62.782 | 48.665 | 1.00 | 19.33 | N |
| ATOM | 7002 | CA | ARG C | 50 | -11.801 | 62.537 | 48.002 | 1.00 | 21.69 | C |
| ATOM | 7003 | C | ARG C | 50 | -12.427 | 63.840 | 47.534 | 1.00 | 21.90 | C |
| ATOM | 7004 | O | ARG C | 50 | -12.743 | 64.007 | 46.358 | 1.00 | 22.77 | O |
| ATOM | 7005 | CB | ARG C | 50 | -12.781 | 61.830 | 48.942 | 1.00 | 20.71 | C |
| ATOM | 7006 | CG | ARG C | 50 | -14.142 | 61.545 | 48.294 | 1.00 | 23.97 | C |
| ATOM | 7007 | CD | ARG C | 50 | -15.116 | 60.944 | 49.292 | 1.00 | 22.58 | C |
| ATOM | 7008 | NE | ARG C | 50 | -14.550 | 59.762 | 49.933 | 1.00 | 22.72 | N |
| ATOM | 7009 | CZ | ARG C | 50 | -14.186 | 58.666 | 49.276 | 1.00 | 22.51 | C |
| ATOM | 7010 | NH1 | ARG C | 50 | -14.335 | 58.606 | 47.959 | 1.00 | 20.89 | N |
| ATOM | 7011 | NH2 | ARG C | 50 | -13.671 | 57.633 | 49.933 | 1.00 | 20.90 | N |
| ATOM | 7012 | N | ARG C | 51 | -12.610 | 64.751 | 48.480 | 1.00 | 21.52 | N |
| ATOM | 7013 | CA | ARG C | 51 | -13.196 | 66.051 | 48.209 | 1.00 | 20.90 | C |
| ATOM | 7014 | C | ARG C | 51 | -12.377 | 66.752 | 47.132 | 1.00 | 19.94 | C |
| ATOM | 7015 | O | ARG C | 51 | -12.926 | 67.250 | 46.155 | 1.00 | 22.47 | O |
| ATOM | 7016 | CB | ARG C | 51 | -13.209 | 66.879 | 49.498 | 1.00 | 21.10 | C |
| ATOM | 7017 | CG | ARG C | 51 | -13.991 | 68.178 | 49.439 | 1.00 | 22.23 | C |
| ATOM | 7018 | CD | ARG C | 51 | -13.962 | 68.852 | 50.811 | 1.00 | 22.95 | C |
| ATOM | 7019 | NE | ARG C | 51 | -14.892 | 69.972 | 50.946 | 1.00 | 24.08 | N |
| ATOM | 7020 | CZ | ARG C | 51 | -14.705 | 71.189 | 50.436 | 1.00 | 25.84 | C |
| ATOM | 7021 | NH1 | ARG C | 51 | -13.614 | 71.475 | 49.739 | 1.00 | 26.33 | N |
| ATOM | 7022 | NH2 | ARG C | 51 | -15.611 | 72.133 | 50.642 | 1.00 | 26.65 | N |
| ATOM | 7023 | N | GLY C | 52 | -11.063 | 66.781 | 47.312 | 1.00 | 18.64 | N |
| ATOM | 7024 | CA | GLY C | 52 | -10.201 | 67.424 | 46.339 | 1.00 | 18.29 | C |
| ATOM | 7025 | C | GLY C | 52 | -10.335 | 66.874 | 44.926 | 1.00 | 17.23 | C |
| ATOM | 7026 | O | GLY C | 52 | -10.389 | 67.640 | 43.967 | 1.00 | 16.45 | O |
| ATOM | 7027 | N | ALA C | 53 | -10.392 | 65.553 | 44.787 | 1.00 | 16.03 | N |
| ATOM | 7028 | CA | ALA C | 53 | -10.516 | 64.949 | 43.466 | 1.00 | 19.46 | C |
| ATOM | 7029 | C | ALA C | 53 | -11.881 | 65.261 | 42.857 | 1.00 | 21.33 | C |
| ATOM | 7030 | O | ALA C | 53 | -11.984 | 65.530 | 41.664 | 1.00 | 23.70 | O |
| ATOM | 7031 | CB | ALA C | 53 | -10.307 | 63.445 | 43.548 | 1.00 | 17.19 | C |
| ATOM | 7032 | N | GLU C | 54 | -12.928 | 65.225 | 43.675 | 1.00 | 21.38 | N |
| ATOM | 7033 | CA | GLU C | 54 | -14.265 | 65.533 | 43.183 | 1.00 | 23.70 | C |
| ATOM | 7034 | C | GLU C | 54 | -14.336 | 66.988 | 42.714 | 1.00 | 24.09 | C |
| ATOM | 7035 | O | GLU C | 54 | -14.819 | 67.277 | 41.615 | 1.00 | 23.84 | O |
| ATOM | 7036 | CB | GLU C | 54 | -15.310 | 65.274 | 44.278 | 1.00 | 22.28 | C |
| ATOM | 7037 | CG | GLU C | 54 | -15.702 | 63.811 | 44.398 | 1.00 | 24.92 | C |
| ATOM | 7038 | CD | GLU C | 54 | -16.709 | 63.550 | 45.497 | 1.00 | 25.35 | C |
| ATOM | 7039 | OE1 | GLU C | 54 | -17.501 | 64.459 | 45.815 | 1.00 | 29.90 | O |
| ATOM | 7040 | OE2 | GLU C | 54 | -16.722 | 62.425 | 46.033 | 1.00 | 26.04 | O |
| ATOM | 7041 | N | VAL C | 55 | -13.846 | 67.905 | 43.541 | 1.00 | 23.35 | N |
| ATOM | 7042 | CA | VAL ·C | 55 | -13.870 | 69.315 | 43.182 | 1.00 | 23.48 | C |
| ATOM | 7043 | C | VAL C | 55 | -13.085 | 69.562 | 41.898 | 1.00 | 24.89 | C |
| ATOM | 7044 | O | VAL C | 55 | -13.573 | 70.224 | 40.986 | 1.00 | 26.46 | O |
| ATOM | 7045 | CB | VAL C | 55 | -13.283 | 70.187 | 44.300 | 1.00 | 23.30 | C |
| ATOM | 7046 | CG1 | VAL C | 55 | -13.212 | 71.639 | 43.843 | 1.00 | 21.54 | C |
| ATOM | 7047 | CG2 | VAL C | 55 | -14.135 | 70.057 | 45.556 | 1.00 | 22.20 | C |
| ATOM | 7048 | N | LEU C | 56 | -11.874 | 69.018 | 41.822 | 1.00 | 25.16 | N |
| ATOM | 7049 | CA | LEU C | 56 | -11.038 | 69.192 | 40.640 | 1.00 | 25.23 | C |
| ATOM | 7050 | C | LEU C | 56 | -11.735 | 68.691 | 39.376 | 1.00 | 26.21 | C |
| ATOM | 7051 | O | LEU C | 56 | -11.727 | 69.360 | 38.344 | 1.00 | 25.78 | O |
| ATOM | 7052 | CB | LEU C | 56 | -9.711 | 68.448 | 40.810 | 1.00 | 24.23 | C |
| ATOM | 7053 | CG | LEU C | 56 | -8.764 | 68.517 | 39.607 | 1.00 | 22.95 | C |
| ATOM | 7054 | CD1 | LEU C | 56 | -8.386 | 69.972 | 39.355 | 1.00 | 22.48 | C |
| ATOM | 7055 | CD2 | LEU C | 56 | -7.523 | 67.676 | 39.862 | 1.00 | 21.53 | C |
| ATOM | 7056 | N | TRP C | 57 | -12.327 | 67.506 | 39.459 | 1.00 | 26.93 | N |
| ATOM | 7057 | CA | TRP C | 57 | -13.017 | 66.931 | 38.313 | 1.00 | 29.14 | C |
| ATOM | 7058 | C | TRP C | 57 | -14.155 | 67.847 | 37.861 | 1.00 | 30.18 | C |
| ATOM | 7059 | O | TRP C | 57 | -14.310 | 68.114 | 36.672 | 1.00 | 30.32 | O |
| ATOM | 7060 | CB | TRP C | 57 | -13.560 | 65.545 | 38.671 | 1.00 | 29.30 | C |
| ATOM | 7061 | CG | TRP C | 57 | -14.078 | 64.794 | 37.491 | 1.00 | 31.32 | C |
| ATOM | 7062 | CD1 | TRP C | 57 | -15.378 | 64.460 | 37.235 | 1.00 | 30.50 | C |
| ATOM | 7063 | CD2 | TRP C | 57 | -13.309 | 64.293 | 36.388 | 1.00 | 30.22 | C |
| ATOM | 7064 | NE1 | TRP C | 57 · | -15.465 | 63.781 | 36.041 | 1.00 | 30.91 | N |
| ATOM | 7065 | CE2 | TRP C | 57 | -14.210 | 63.665 | 35.501 | 1.00 | 29.92 | C |
| ATOM | 7066 | CE3 | TRP C | 57 | -11.945 | 64.315 | 36.065 | 1.00 | 31.90 | C |
| ATOM | 7067 | CZ2 | TRP C | 57 | -13.793 | 63.062 | 34.309 | 1.00 | 30.24 | C |
| ATOM | 7068 | CZ3 | TRP C | 57 | -11.528 | 63.713 | 34.875 | 1.00 | 30.76 | C |
| ATOM | 7069 | CH2 | TRP C | 57 | -12.453 | 63.096 | 34.014 | 1.00 | 30.53 | C |
| ATOM | 7070 | N | GLU C | 58 | -14.948 | 68.329 | 38.812 | 1.00 | 31.24 | N |
| ATOM | 7071 | CA | GLU C | 58 | -16.056 | 69.228 | 38.505 | 1.00 | 32.77 | C |
| ATOM | 7072 | C | GLU C | 58 | -15.556 | 70.536 | 37.884 | 1.00 | 31.72 | C |
| ATOM | 7073 | O | GLU C | 58 | -16.097 | 70.998 | 36.880 | 1.00 | 31.12 | O |
| ATOM | 7074 | CB | GLU C | 58 | -16.855 | 69.552 | 39.772 | 1.00 | 35.50 | C |
| ATOM | 7075 | CG | GLU C | 58 | -17.817 | 68.462 | 40.226 | 1.00 | 41.33 | C |
| ATOM | 7076 | CD | GLU C | 58 | -18.509 | 68.811 | 41.538 | 1.00 | 45.66 | C |
| ATOM | 7077 | OE1 | GLU C | 58 | -19.046 | 69.939 | 41.645 | 1.00 | 48.07 | O |
| ATOM | 7078 | OE2 | GLU C | 58 | -18.519 | 67.958 | 42.458 | 1.00 | 47.18 | O |
| ATOM | 7079 | N | GLN C | 59 | -14.531 | 71.134 | 38.486 | 1.00 | 29.77 | N |

| ATOM | 7080 | CA  | GLN | C | 59 | -13.990 | 72.382 | 37.966 | 1.00 | 29.54 | C |
|------|------|-----|-----|---|----|---------|--------|--------|------|-------|---|
| ATOM | 7081 | C   | GLN | C | 59 | -13.503 | 72.217 | 36.529 | 1.00 | 27.49 | C |
| ATOM | 7082 | O   | GLN | C | 59 | -13.671 | 73.114 | 35.710 | 1.00 | 27.04 | O |
| ATOM | 7083 | CB  | GLN | C | 59 | -12.844 | 72.898 | 38.849 | 1.00 | 28.93 | C |
| ATOM | 7084 | CG  | GLN | C | 59 | -13.244 | 73.249 | 40.285 | 1.00 | 30.43 | C |
| ATOM | 7085 | CD  | GLN | C | 59 | -12.112 | 73.932 | 41.078 | 1.00 | 32.83 | C |
| ATOM | 7086 | OE1 | GLN | C | 59 | -10.929 | 73.701 | 40.818 | 1.00 | 31.59 | O |
| ATOM | 7087 | NE2 | GLN | C | 59 | -12.480 | 74.758 | 42.057 | 1.00 | 30.48 | N |
| ATOM | 7088 | N   | LEU | C | 60 | -12.909 | 71.069 | 36.219 | 1.00 | 28.81 | N |
| ATOM | 7089 | CA  | LEU | C | 60 | -12.404 | 70.818 | 34.869 | 1.00 | 29.92 | C |
| ATOM | 7090 | C   | LEU | C | 60 | -13.534 | 70.797 | 33.843 | 1.00 | 31.53 | C |
| ATOM | 7091 | O   | LEU | C | 60 | -13.312 | 71.029 | 32.658 | 1.00 | 30.97 | O |
| ATOM | 7092 | CB  | LEU | C | 60 | -11.633 | 69.495 | 34.818 | 1.00 | 27.06 | C |
| ATOM | 7093 | CG  | LEU | C | 60 | -10.272 | 69.470 | 35.523 | 1.00 | 28.52 | C |
| ATOM | 7094 | CD1 | LEU | C | 60 | -9.702  | 68.055 | 35.523 | 1.00 | 27.30 | C |
| ATOM | 7095 | CD2 | LEU | C | 60 | -9.317  | 70.419 | 34.812 | 1.00 | 26.40 | C |
| ATOM | 7096 | N   | HIS | C | 61 | -14.749 | 70.527 | 34.305 | 1.00 | 33.51 | N |
| ATOM | 7097 | CA  | HIS | C | 61 | -15.902 | 70.485 | 33.411 | 1.00 | 36.35 | C |
| ATOM | 7098 | C   | HIS | C | 61 | -16.736 | 71.769 | 33.428 | 1.00 | 36.99 | C |
| ATOM | 7099 | O   | HIS | C | 61 | -17.291 | 72.160 | 32.405 | 1.00 | 37.26 | O |
| ATOM | 7100 | CB  | HIS | C | 61 | -16.795 | 69.297 | 33.773 | 1.00 | 38.87 | C |
| ATOM | 7101 | CG  | HIS | C | 61 | -16.178 | 67.964 | 33.480 | 1.00 | 41.32 | C |
| ATOM | 7102 | ND1 | HIS | C | 61 | -16.138 | 67.423 | 32.212 | 1.00 | 43.23 | N |
| ATOM | 7103 | CD2 | HIS | C | 61 | -15.567 | 67.068 | 34.290 | 1.00 | 42.10 | C |
| ATOM | 7104 | CE1 | HIS | C | 61 | -15.530 | 66.251 | 32.254 | 1.00 | 43.54 | C |
| ATOM | 7105 | NE2 | HIS | C | 61 | -15.173 | 66.013 | 33.503 | 1.00 | 44.18 | N |
| ATOM | 7106 | N   | ASP | C | 62 | -16.813 | 72.428 | 34.581 | 1.00 | 37.85 | N |
| ATOM | 7107 | CA  | ASP | C | 62 | -17.609 | 73.646 | 34.709 | 1.00 | 38.39 | C |
| ATOM | 7108 | C   | ASP | C | 62 | -16.907 | 74.943 | 34.350 | 1.00 | 38.47 | C |
| ATOM | 7109 | O   | ASP | C | 62 | -17.567 | 75.910 | 33.981 | 1.00 | 39.53 | O |
| ATOM | 7110 | CB  | ASP | C | 62 | -18.167 | 73.774 | 36.127 | 1.00 | 38.58 | C |
| ATOM | 7111 | CG  | ASP | C | 62 | -19.039 | 72.599 | 36.519 | 1.00 | 40.38 | C |
| ATOM | 7112 | OD1 | ASP | C | 62 | -19.635 | 71.978 | 35.618 | 1.00 | 41.20 | O |
| ATOM | 7113 | OD2 | ASP | C | 62 | -19.140 | 72.305 | 37.730 | 1.00 | 41.15 | O |
| ATOM | 7114 | N   | LEU | C | 63 | -15.583 | 74.977 | 34.460 | 1.00 | 38.14 | N |
| ATOM | 7115 | CA  | LEU | C | 63 | -14.836 | 76.192 | 34.149 | 1.00 | 37.36 | C |
| ATOM | 7116 | C   | LEU | C | 63 | -14.243 | 76.162 | 32.745 | 1.00 | 37.31 | C |
| ATOM | 7117 | O   | LEU | C | 63 | -14.026 | 75.091 | 32.177 | 1.00 | 38.46 | O |
| ATOM | 7118 | CB  | LEU | C | 63 | -13.716 | 76.401 | 35.170 | 1.00 | 37.11 | C |
| ATOM | 7119 | CG  | LEU | C | 63 | -14.104 | 76.391 | 36.652 | 1.00 | 37.82 | C |
| ATOM | 7120 | CD1 | LEU | C | 63 | -12.873 | 76.687 | 37.494 | 1.00 | 35.89 | C |
| ATOM | 7121 | CD2 | LEU | C | 63 | -15.187 | 77.424 | 36.920 | 1.00 | 36.63 | C |
| ATOM | 7122 | N   | GLU | C | 64 | -13.989 | 77.344 | 32.188 | 1.00 | 36.41 | N |
| ATOM | 7123 | CA  | GLU | C | 64 | -13.411 | 77.450 | 30.854 | 1.00 | 35.05 | C |
| ATOM | 7124 | C   | GLU | C | 64 | -12.099 | 76.678 | 30.910 | 1.00 | 33.26 | C |
| ATOM | 7125 | O   | GLU | C | 64 | -11.723 | 75.992 | 29.963 | 1.00 | 33.53 | O |
| ATOM | 7126 | CB  | GLU | C | 64 | -13.161 | 78.920 | 30.498 | 1.00 | 36.96 | C |
| ATOM | 7127 | CG  | GLU | C | 64 | -13.430 | 79.268 | 29.038 | 1.00 | 39.19 | C |
| ATOM | 7128 | CD  | GLU | C | 64 | -13.283 | 80.757 | 28.752 | 1.00 | 42.08 | C |
| ATOM | 7129 | OE1 | GLU | C | 64 | -13.857 | 81.568 | 29.514 | 1.00 | 42.13 | O |
| ATOM | 7130 | OE2 | GLU | C | 64 | -12.603 | 81.119 | 27.763 | 1.00 | 41.36 | O |
| ATOM | 7131 | N   | TRP | C | 65 | -11.410 | 76.809 | 32.039 | 1.00 | 31.95 | N |
| ATOM | 7132 | CA  | TRP | C | 65 | -10.161 | 76.100 | 32.285 | 1.00 | 30.91 | C |
| ATOM | 7133 | C   | TRP | C | 65 | -9.697  | 76.359 | 33.717 | 1.00 | 30.61 | C |
| ATOM | 7134 | O   | TRP | C | 65 | -10.088 | 77.349 | 34.339 | 1.00 | 30.88 | O |
| ATOM | 7135 | CB  | TRP | C | 65 | -9.086  | 76.483 | 31.253 | 1.00 | 28.80 | C |
| ATOM | 7136 | CG  | TRP | C | 65 | -8.331  | 77.749 | 31.492 | 1.00 | 29.71 | C |
| ATOM | 7137 | CD1 | TRP | C | 65 | -7.163  | 77.888 | 32.187 | 1.00 | 29.14 | C |
| ATOM | 7138 | CD2 | TRP | C | 65 | -8.649  | 79.050 | 30.979 | 1.00 | 28.28 | C |
| ATOM | 7139 | NE1 | TRP | C | 65 | -6.729  | 79.190 | 32.132 | 1.00 | 28.75 | N |
| ATOM | 7140 | CE2 | TRP | C | 65 | -7.623  | 79.925 | 31.398 | 1.00 | 28.47 | C |
| ATOM | 7141 | CE3 | TRP | C | 65 | -9.700  | 79.560 | 30.203 | 1.00 | 29.19 | C |
| ATOM | 7142 | CZ2 | TRP | C | 65 | -7.616  | 81.287 | 31.067 | 1.00 | 29.30 | C |
| ATOM | 7143 | CZ3 | TRP | C | 65 | -9.694  | 80.912 | 29.873 | 1.00 | 28.17 | C |
| ATOM | 7144 | CH2 | TRP | C | 65 | -8.657  | 81.759 | 30.306 | 1.00 | 28.91 | C |
| ATOM | 7145 | N   | VAL | C | 66 | -8.899  | 75.438 | 34.245 | 1.00 | 29.17 | N |
| ATOM | 7146 | CA  | VAL | C | 66 | -8.391  | 75.528 | 35.606 | 1.00 | 26.49 | C |
| ATOM | 7147 | C   | VAL | C | 66 | -6.905  | 75.823 | 35.566 | 1.00 | 25.74 | C |
| ATOM | 7148 | O   | VAL | C | 66 | -6.136  | 75.056 | 34.993 | 1.00 | 28.08 | O |
| ATOM | 7149 | CB  | VAL | C | 66 | -8.601  | 74.190 | 36.354 | 1.00 | 27.67 | C |
| ATOM | 7150 | CG1 | VAL | C | 66 | -8.057  | 74.287 | 37.768 | 1.00 | 25.43 | C |
| ATOM | 7151 | CG2 | VAL | C | 66 | -10.078 | 73.827 | 36.366 | 1.00 | 27.01 | C |
| ATOM | 7152 | N   | ASN | C | 67 | -6.491  | 76.934 | 36.161 | 1.00 | 24.02 | N |
| ATOM | 7153 | CA  | ASN | C | 67 | -5.076  | 77.261 | 36.163 | 1.00 | 22.88 | C |
| ATOM | 7154 | C   | ASN | C | 67 | -4.531  | 77.322 | 37.582 | 1.00 | 22.43 | C |
| ATOM | 7155 | O   | ASN | C | 67 | -5.291  | 77.389 | 38.549 | 1.00 | 21.40 | O |
| ATOM | 7156 | CB  | ASN | C | 67 | -4.822  | 78.576 | 35.423 | 1.00 | 23.67 | C |
| ATOM | 7157 | CG  | ASN | C | 67 | -5.606  | 79.740 | 35.996 | 1.00 | 27.01 | C |
| ATOM | 7158 | OD1 | ASN | C | 67 | -6.356  | 79.597 | 36.966 | 1.00 | 26.49 | O |
| ATOM | 7159 | ND2 | ASN | C | 67 | -5.434  | 80.911 | 35.390 | 1.00 | 28.36 | N |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 7160 | N | ALA | C | 68 | -3.212 | 77.283 | 37.707 | 1.00 | 20.18 | N |
| ATOM | 7161 | CA | ALA | C | 68 | -2.593 | 77.310 | 39.020 | 1.00 | 20.84 | C |
| ATOM | 7162 | C | ALA | C | 68 | -1.131 | 77.696 | 38.924 | 1.00 | 19.62 | C |
| ATOM | 7163 | O | ALA | C | 68 | -0.563 | 77.762 | 37.835 | 1.00 | 19.16 | O |
| ATOM | 7164 | CB | ALA | C | 68 | -2.724 | 75.931 | 39.693 | 1.00 | 19.94 | C |
| ATOM | 7165 | N | LEU | C | 69 | -0.535 | 77.935 | 40.086 | 1.00 | 18.58 | N |
| ATOM | 7166 | CA | LEU | C | 69 | 0.867 | 78.308 | 40.195 | 1.00 | 18.05 | C |
| ATOM | 7167 | C | LEU | C | 69 | 1.537 | 77.321 | 41.145 | 1.00 | 18.90 | C |
| ATOM | 7168 | O | LEU | C | 69 | 0.898 | 76.803 | 42.066 | 1.00 | 17.67 | O |
| ATOM | 7169 | CB | LEU | C | 69 | 0.993 | 79.726 | 40.772 | 1.00 | 18.33 | C |
| ATOM | 7170 | CG | LEU | C | 69 | 0.381 | 80.891 | 39.990 | 1.00 | 19.90 | C |
| ATOM | 7171 | CD1 | LEU | C | 69 | 0.413 | 82.157 | 40.840 | 1.00 | 20.51 | C |
| ATOM | 7172 | CD2 | LEU | C | 69 | 1.140 | 81.093 | 38.695 | 1.00 | 19.62 | C |
| ATOM | 7173 | N | GLY | C | 70 | 2.824 | 77.073 | 40.926 | 1.00 | 18.75 | N |
| ATOM | 7174 | CA | GLY | C | 70 | 3.549 | 76.159 | 41.786 | 1.00 | 19.79 | C |
| ATOM | 7175 | C | GLY | C | 70 | 3.705 | 76.713 | 43.192 | 1.00 | 21.14 | C |
| ATOM | 7176 | O | GLY | C | 70 | 4.094 | 77.868 | 43.367 | 1.00 | 20.73 | O |
| ATOM | 7177 | N | ALA | C | 71 | 3.390 | 75.893 | 44.194 | 1.00 | 18.92 | N |
| ATOM | 7178 | CA | ALA | C | 71 | 3.505 | 76.302 | 45.588 | 1.00 | 18.53 | C |
| ATOM | 7179 | C | ALA | C | 71 | 4.463 | 75.363 | 46.316 | 1.00 | 19.25 | C |
| ATOM | 7180 | O | ALA | C | 71 | 4.322 | 74.143 | 46.216 | 1.00 | 19.99 | O |
| ATOM | 7181 | CB | ALA | C | 71 | 2.139 | 76.262 | 46.255 | 1.00 | 16.54 | C |
| ATOM | 7182 | N | LEU | C | 72 | 5.433 | 75.923 | 47.041 | 1.00 | 18.43 | N |
| ATOM | 7183 | CA | LEU | C | 72 | 6.388 | 75.098 | 47.782 | 1.00 | 18.57 | C |
| ATOM | 7184 | C | LEU | C | 72 | 6.250 | 75.223 | 49.297 | 1.00 | 18.95 | C |
| ATOM | 7185 | O | LEU | C | 72 | 6.916 | 74.502 | 50.033 | 1.00 | 19.88 | O |
| ATOM | 7186 | CB | LEU | C | 72 | 7.828 | 75.415 | 47.376 | 1.00 | 17.49 | C |
| ATOM | 7187 | CG | LEU | C | 72 | 8.352 | 76.841 | 47.564 | 1.00 | 17.98 | C |
| ATOM | 7188 | CD1 | LEU | C | 72 | 9.671 | 76.811 | 48.344 | 1.00 | 18.35 | C |
| ATOM | 7189 | CD2 | LEU | C | 72 | 8.551 | 77.482 | 46.197 | 1.00 | 16.53 | C |
| ATOM | 7190 | N | THR | C | 73 | 5.415 | 76.152 | 49.764 | 1.00 | 18.61 | N |
| ATOM | 7191 | CA | THR | C | 73 | 5.183 | 76.302 | 51.201 | 1.00 | 18.12 | C |
| ATOM | 7192 | C | THR | C | 73 | 3.696 | 76.495 | 51.444 | 1.00 | 18.07 | C |
| ATOM | 7193 | O | THR | C | 73 | 2.955 | 76.870 | 50.533 | 1.00 | 16.81 | O |
| ATOM | 7194 | CB | THR | C | 73 | 5.913 | 77.511 | 51.821 | 1.00 | 19.17 | C |
| ATOM | 7195 | OG1 | THR | C | 73 | 5.159 | 78.702 | 51.568 | 1.00 | 19.95 | O |
| ATOM | 7196 | CG2 | THR | C | 73 | 7.325 | 77.640 | 51.255 | 1.00 | 17.94 | C |
| ATOM | 7197 | N | GLY | C | 74 | 3.269 | 76.230 | 52.677 | 1.00 | 16.80 | N |
| ATOM | 7198 | CA | GLY | C | 74 | 1.870 | 76.369 | 53.024 | 1.00 | 18.58 | C |
| ATOM | 7199 | C | GLY | C | 74 | 1.330 | 77.754 | 52.732 | 1.00 | 18.88 | C |
| ATOM | 7200 | O | GLY | C | 74 | 0.332 | 77.892 | 52.026 | 1.00 | 21.96 | O |
| ATOM | 7201 | N | ASN | C | 75 | 1.988 | 78.777 | 53.273 | 1.00 | 18.26 | N |
| ATOM | 7202 | CA | ASN | C | 75 | 1.564 | 80.158 | 53.071 | 1.00 | 18.33 | C |
| ATOM | 7203 | C | ASN | C | 75 | 1.397 | 80.525 | 51.595 | 1.00 | 19.03 | C |
| ATOM | 7204 | O | ASN | C | 75 | 0.519 | 81.316 | 51.244 | 1.00 | 19.91 | O |
| ATOM | 7205 | CB | ASN | C | 75 | 2.559 | 81.113 | 53.728 | 1.00 | 17.39 | C |
| ATOM | 7206 | CG | ASN | C | 75 | 2.510 | 81.055 | 55.240 | 1.00 | 17.18 | C |
| ATOM | 7207 | OD1 | ASN | C | 75 | 1.847 | 80.193 | 55.824 | 1.00 | 19.35 | O |
| ATOM | 7208 | ND2 | ASN | C | 75 | 3.219 | 81.970 | 55.884 | 1.00 | 12.68 | N |
| ATOM | 7209 | N | MET | C | 76 | 2.239 | 79.966 | 50.733 | 1.00 | 17.66 | N |
| ATOM | 7210 | CA | MET | C | 76 | 2.131 | 80.248 | 49.309 | 1.00 | 19.47 | C |
| ATOM | 7211 | C | MET | C | 76 | 0.762 | 79.839 | 48.791 | 1.00 | 20.82 | C |
| ATOM | 7212 | O | MET | C | 76 | 0.068 | 80.624 | 48.141 | 1.00 | 22.25 | O |
| ATOM | 7213 | CB | MET | C | 76 | 3.197 | 79.492 | 48.519 | 1.00 | 19.35 | C |
| ATOM | 7214 | CG | MET | C | 76 | 4.565 | 80.141 | 48.525 | 1.00 | 20.16 | C |
| ATOM | 7215 | SD | MET | C | 76 | 5.577 | 79.504 | 47.180 | 1.00 | 19.18 | S |
| ATOM | 7216 | CE | MET | C | 76 | 7.158 | 80.222 | 47.605 | 1.00 | 18.03 | C |
| ATOM | 7217 | N | ALA | C | 77 | 0.380 | 78.601 | 49.081 | 1.00 | 20.42 | N |
| ATOM | 7218 | CA | ALA | C | 77 | -0.901 | 78.080 | 48.636 | 1.00 | 21.24 | C |
| ATOM | 7219 | C | ALA | C | 77 | -2.032 | 78.934 | 49.201 | 1.00 | 20.65 | C |
| ATOM | 7220 | O | ALA | C | 77 | -3.028 | 79.189 | 48.514 | 1.00 | 21.00 | O |
| ATOM | 7221 | CB | ALA | C | 77 | -1.057 | 76.613 | 49.067 | 1.00 | 18.86 | C |
| ATOM | 7222 | N | VAL | C | 78 | -1.875 | 79.375 | 50.447 | 1.00 | 19.44 | N |
| ATOM | 7223 | CA | VAL | C | 78 | -2.882 | 80.217 | 51.090 | 1.00 | 18.62 | C |
| ATOM | 7224 | C | VAL | C | 78 | -3.077 | 81.515 | 50.302 | 1.00 | 19.24 | C |
| ATOM | 7225 | O | VAL | C | 78 | -4.208 | 81.922 | 50.032 | 1.00 | 18.54 | O |
| ATOM | 7226 | CB | VAL | C | 78 | -2.477 | 80.561 | 52.542 | 1.00 | 18.56 | C |
| ATOM | 7227 | CG1 | VAL | C | 78 | -3.328 | 81.709 | 53.075 | 1.00 | 18.06 | C |
| ATOM | 7228 | CG2 | VAL | C | 78 | -2.655 | 79.327 | 53.428 | 1.00 | 17.48 | C |
| ATOM | 7229 | N | GLN | C | 79 | -1.977 | 82.157 | 49.925 | 1.00 | 20.00 | N |
| ATOM | 7230 | CA | GLN | C | 79 | -2.076 | 83.402 | 49.169 | 1.00 | 22.19 | C |
| ATOM | 7231 | C | GLN | C | 79 | -2.696 | 83.151 | 47.802 | 1.00 | 21.93 | C |
| ATOM | 7232 | O | GLN | C | 79 | -3.541 | 83.920 | 47.350 | 1.00 | 22.33 | O |
| ATOM | 7233 | CB | GLN | C | 79 | -0.700 | 84.052 | 48.998 | 1.00 | 22.75 | C |
| ATOM | 7234 | CG | GLN | C | 79 | -0.082 | 84.579 | 50.287 | 1.00 | 23.54 | C |
| ATOM | 7235 | CD | GLN | C | 79 | -1.007 | 85.504 | 51.055 | 1.00 | 25.26 | C |
| ATOM | 7236 | OE1 | GLN | C | 79 | -1.733 | 86.304 | 50.468 | 1.00 | 28.67 | O |
| ATOM | 7237 | NE2 | GLN | C | 79 | -0.968 | 85.413 | 52.378 | 1.00 | 24.50 | N |
| ATOM | 7238 | N | GLN | C | 80 | -2.283 | 82.070 | 47.149 | 1.00 | 22.26 | N |
| ATOM | 7239 | CA | GLN | C | 80 | -2.816 | 81.744 | 45.832 | 1.00 | 22.38 | C |

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|------|------|-----|-----|---|----|---------|--------|--------|-----------|------|---|
| ATOM | 7240 | C   | GLN | C | 80 | -4.341  | 81.637 | 45.888 | 1.00 22.97 | C |
| ATOM | 7241 | O   | GLN | C | 80 | -5.037  | 82.143 | 45.008 | 1.00 23.68 | O |
| ATOM | 7242 | CB  | GLN | C | 80 | -2.191  | 80.437 | 45.322 | 1.00 22.08 | C |
| ATOM | 7243 | CG  | GLN | C | 80 | -0.680  | 80.539 | 45.085 | 1.00 18.72 | C |
| ATOM | 7244 | CD  | GLN | C | 80 | -0.038  | 79.206 | 44.723 | 1.00 19.66 | C |
| ATOM | 7245 | OE1 | GLN | C | 80 | -0.665  | 78.150 | 44.822 | 1.00 17.91 | O |
| ATOM | 7246 | NE2 | GLN | C | 80 | 1.228   | 79.250 | 44.317 | 1.00 18.90 | N |
| ATOM | 7247 | N   | VAL | C | 81 | -4.854  | 80.996 | 46.933 | 1.00 21.97 | N |
| ATOM | 7248 | CA  | VAL | C | 81 | -6.291  | 80.840 | 47.100 | 1.00 21.58 | C |
| ATOM | 7249 | C   | VAL | C | 81 | -6.895  | 82.186 | 47.479 | 1.00 22.88 | C |
| ATOM | 7250 | O   | VAL | C | 81 | -7.920  | 82.597 | 46.933 | 1.00 24.58 | O |
| ATOM | 7251 | CB  | VAL | C | 81 | -6.622  | 79.793 | 48.202 | 1.00 20.72 | C |
| ATOM | 7252 | CG1 | VAL | C | 81 | -8.119  | 79.785 | 48.489 | 1.00 19.52 | C |
| ATOM | 7253 | CG2 | VAL | C | 81 | -6.166  | 78.405 | 47.757 | 1.00 18.32 | C |
| ATOM | 7254 | N   | ARG | C | 82 | -6.257  | 82.874 | 48.418 | 1.00 24.81 | N |
| ATOM | 7255 | CA  | ARG | C | 82 | -6.735  | 84.184 | 48.848 | 1.00 26.92 | C |
| ATOM | 7256 | C   | ARG | C | 82 | -6.874  | 85.106 | 47.642 | 1.00 26.89 | C |
| ATOM | 7257 | O   | ARG | C | 82 | -7.788  | 85.930 | 47.585 | 1.00 29.26 | O |
| ATOM | 7258 | CB  | ARG | C | 82 | -5.764  | 84.809 | 49.858 | 1.00 24.96 | C |
| ATOM | 7259 | CG  | ARG | C | 82 | -6.084  | 86.260 | 50.224 | 1.00 27.69 | C |
| ATOM | 7260 | CD  | ARG | C | 82 | -7.396  | 86.402 | 50.988 | 1.00 27.20 | C |
| ATOM | 7261 | NE  | ARG | C | 82 | -7.254  | 86.011 | 52.388 | 1.00 32.09 | N |
| ATOM | 7262 | CZ  | ARG | C | 82 | -8.250  | 85.985 | 53.272 | 1.00 32.07 | C |
| ATOM | 7263 | NH1 | ARG | C | 82 | -9.481  | 86.327 | 52.910 | 1.00 31.72 | N |
| ATOM | 7264 | NH2 | ARG | C | 82 | -8.014  | 85.611 | 54.525 | 1.00 29.83 | N |
| ATOM | 7265 | N   | ALA | C | 83 | -5.967  | 84.949 | 46.680 | 1.00 26.46 | N |
| ATOM | 7266 | CA  | ALA | C | 83 | -5.955  | 85.763 | 45.467 | 1.00 25.82 | C |
| ATOM | 7267 | C   | ALA | C | 83 | -7.007  | 85.374 | 44.434 | 1.00 26.46 | C |
| ATOM | 7268 | O   | ALA | C | 83 | -7.183  | 86.082 | 43.448 | 1.00 27.88 | O |
| ATOM | 7269 | CB  | ALA | C | 83 | -4.577  | 85.720 | 44.829 | 1.00 23.14 | C |
| ATOM | 7270 | N   | GLY | C | 84 | -7.687  | 84.249 | 44.641 | 1.00 27.41 | N |
| ATOM | 7271 | CA  | GLY | C | 84 | -8.713  | 83.831 | 43.698 | 1.00 26.94 | C |
| ATOM | 7272 | C   | GLY | C | 84 | -8.504  | 82.531 | 42.928 | 1.00 26.57 | C |
| ATOM | 7273 | O   | GLY | C | 84 | -9.417  | 82.065 | 42.248 | 1.00 25.73 | O |
| ATOM | 7274 | N   | LEU | C | 85 | -7.319  | 81.937 | 43.015 | 1.00 26.33 | N |
| ATOM | 7275 | CA  | LEU | C | 85 | -7.065  | 80.692 | 42.292 | 1.00 24.40 | C |
| ATOM | 7276 | C   | LEU | C | 85 | -7.890  | 79.551 | 42.876 | 1.00 24.89 | C |
| ATOM | 7277 | O   | LEU | C | 85 | -8.196  | 79.531 | 44.068 | 1.00 23.81 | O |
| ATOM | 7278 | CB  | LEU | C | 85 | -5.570  | 80.366 | 42.321 | 1.00 22.72 | C |
| ATOM | 7279 | CG  | LEU | C | 85 | -4.719  | 81.518 | 41.768 | 1.00 21.55 | C |
| ATOM | 7280 | CD1 | LEU | C | 85 | -3.263  | 81.110 | 41.700 | 1.00 20.68 | C |
| ATOM | 7281 | CD2 | LEU | C | 85 | -5.221  | 81.902 | 40.383 | 1.00 22.58 | C |
| ATOM | 7282 | N   | LYS | C | 86 | -8.261  | 78.600 | 42.027 | 1.00 26.93 | N |
| ATOM | 7283 | CA  | LYS | C | 86 | -9.084  | 77.482 | 42.466 | 1.00 26.96 | C |
| ATOM | 7284 | C   | LYS | C | 86 | -8.390  | 76.132 | 42.401 | 1.00 26.47 | C |
| ATOM | 7285 | O   | LYS | C | 86 | -9.040  | 75.085 | 42.461 | 1.00 26.18 | O |
| ATOM | 7286 | CB  | LYS | C | 86 | -10.380 | 77.453 | 41.650 | 1.00 29.32 | C |
| ATOM | 7287 | CG  | LYS | C | 86 | -11.265 | 78.670 | 41.892 | 1.00 31.46 | C |
| ATOM | 7288 | CD  | LYS | C | 86 | -12.611 | 78.544 | 41.195 | 1.00 35.42 | C |
| ATOM | 7289 | CE  | LYS | C | 86 | -13.505 | 79.746 | 41.507 | 1.00 36.65 | C |
| ATOM | 7290 | NZ  | LYS | C | 86 | -14.834 | 79.638 | 40.842 | 1.00 39.41 | N |
| ATOM | 7291 | N   | ALA | C | 87 | -7.068  | 76.161 | 42.277 | 1.00 24.83 | N |
| ATOM | 7292 | CA  | ALA | C | 87 | -6.271  | 74.942 | 42.226 | 1.00 22.98 | C |
| ATOM | 7293 | C   | ALA | C | 87 | -4.842  | 75.280 | 42.619 | 1.00 23.42 | C |
| ATOM | 7294 | O   | ALA | C | 87 | -4.389  | 76.417 | 42.448 | 1.00 22.39 | O |
| ATOM | 7295 | CB  | ALA | C | 87 | -6.306  | 74.342 | 40.832 | 1.00 22.86 | C |
| ATOM | 7296 | N   | ILE | C | 88 | -4.138  | 74.293 | 43.158 | 1.00 21.85 | N |
| ATOM | 7297 | CA  | ILE | C | 88 | -2.761  | 74.484 | 43.573 | 1.00 19.80 | C |
| ATOM | 7298 | C   | ILE | C | 88 | -1.894  | 73.452 | 42.877 | 1.00 21.01 | C |
| ATOM | 7299 | O   | ILE | C | 88 | -2.215  | 72.263 | 42.856 | 1.00 20.48 | O |
| ATOM | 7300 | CB  | ILE | C | 88 | -2.609  | 74.311 | 45.102 | 1.00 20.79 | C |
| ATOM | 7301 | CG1 | ILE | C | 88 | -3.436  | 75.375 | 45.828 | 1.00 22.14 | C |
| ATOM | 7302 | CG2 | ILE | C | 88 | -1.146  | 74.427 | 45.501 | 1.00 17.70 | C |
| ATOM | 7303 | CD1 | ILE | C | 88 | -3.672  | 75.066 | 47.279 | 1.00 26.14 | C |
| ATOM | 7304 | N   | TYR | C | 89 | -0.806  | 73.914 | 42.283 | 1.00 19.97 | N |
| ATOM | 7305 | CA  | TYR | C | 89 | 0.104   | 73.006 | 41.622 | 1.00 20.63 | C |
| ATOM | 7306 | C   | TYR | C | 89 | 1.302   | 72.804 | 42.543 | 1.00 20.74 | C |
| ATOM | 7307 | O   | TYR | C | 89 | 1.844   | 73.769 | 43.075 | 1.00 22.79 | O |
| ATOM | 7308 | CB  | TYR | C | 89 | 0.571   | 73.571 | 40.288 | 1.00 18.47 | C |
| ATOM | 7309 | CG  | TYR | C | 89 | 1.557   | 72.650 | 39.627 | 1.00 19.02 | C |
| ATOM | 7310 | CD1 | TYR | C | 89 | 1.176   | 71.377 | 39.226 | 1.00 18.67 | C |
| ATOM | 7311 | CD2 | TYR | C | 89 | 2.894   | 73.014 | 39.486 | 1.00 19.15 | C |
| ATOM | 7312 | CE1 | TYR | C | 89 | 2.100   | 70.484 | 38.709 | 1.00 19.66 | C |
| ATOM | 7313 | CE2 | TYR | C | 89 | 3.825   | 72.133 | 38.972 | 1.00 18.96 | C |
| ATOM | 7314 | CZ  | TYR | C | 89 | 3.421   | 70.869 | 38.589 | 1.00 20.49 | C |
| ATOM | 7315 | OH  | TYR | C | 89 | 4.341   | 69.982 | 38.102 | 1.00 20.35 | O |
| ATOM | 7316 | N   | LEU | C | 90 | 1.698   | 71.552 | 42.744 | 1.00 20.15 | N |
| ATOM | 7317 | CA  | LEU | C | 90 | 2.829   | 71.241 | 43.610 | 1.00 19.94 | C |
| ATOM | 7318 | C   | LEU | C | 90 | 3.950   | 70.662 | 42.769 | 1.00 20.61 | C |
| ATOM | 7319 | O   | LEU | C | 90 | 3.970   | 69.472 | 42.462 | 1.00 23.49 | O |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 7320 | CB | LEU | C | 90 | 2.389 | 70.264 | 44.705 | 1.00 | 19.34 | C |
| ATOM | 7321 | CG | LEU | C | 90 | 3.348 | 69.594 | 45.701 | 1.00 | 20.98 | C |
| ATOM | 7322 | CD1 | LEU | C | 90 | 4.698 | 70.282 | 45.785 | 1.00 | 16.74 | C |
| ATOM | 7323 | CD2 | LEU | C | 90 | 2.651 | 69.580 | 47.045 | 1.00 | 16.76 | C |
| ATOM | 7324 | N | SER | C | 91 | 4.882 | 71.534 | 42.404 | 1.00 | 20.74 | N |
| ATOM | 7325 | CA | SER | C | 91 | 6.028 | 71.196 | 41.567 | 1.00 | 19.92 | C |
| ATOM | 7326 | C | SER | C | 91 | 7.104 | 70.351 | 42.238 | 1.00 | 19.42 | C |
| ATOM | 7327 | O | SER | C | 91 | 7.508 | 70.629 | 43.367 | 1.00 | 18.57 | O |
| ATOM | 7328 | CB | SER | C | 91 | 6.667 | 72.488 | 41.046 | 1.00 | 20.54 | C |
| ATOM | 7329 | OG | SER | C | 91 | 7.992 | 72.258 | 40.592 | 1.00 | 17.99 | O |
| ATOM | 7330 | N | GLY | C | 92 | 7.575 | 69.330 | 41.524 | 1.00 | 19.23 | N |
| ATOM | 7331 | CA | GLY | C | 92 | 8.623 | 68.470 | 42.050 | 1.00 | 19.12 | C |
| ATOM | 7332 | C | GLY | C | 92 | 9.933 | 69.229 | 41.968 | 1.00 | 20.24 | C |
| ATOM | 7333 | O | GLY | C | 92 | 10.808 | 69.110 | 42.834 | 1.00 | 18.95 | O |
| ATOM | 7334 | N | TRP | C | 93 | 10.059 | 70.020 | 40.903 | 1.00 | 19.94 | N |
| ATOM | 7335 | CA | TRP | C | 93 | 11.234 | 70.851 | 40.676 | 1.00 | 19.23 | C |
| ATOM | 7336 | C | TRP | C | 93 | 11.480 | 71.719 | 41.919 | 1.00 | 19.67 | C |
| ATOM | 7337 | O | TRP | C | 93 | 12.576 | 71.718 | 42.488 | 1.00 | 20.04 | O |
| ATOM | 7338 | CB | TRP | C | 93 | 10.999 | 71.765 | 39.466 | 1.00 | 19.69 | C |
| ATOM | 7339 | CG | TRP | C | 93 | 12.235 | 72.459 | 38.956 | 1.00 | 20.13 | C |
| ATOM | 7340 | CD1 | TRP | C | 93 | 12.946 | 72.138 | 37.837 | 1.00 | 21.41 | C |
| ATOM | 7341 | CD2 | TRP | C | 93 | 12.905 | 73.584 | 39.546 | 1.00 | 18.83 | C |
| ATOM | 7342 | NE1 | TRP | C | 93 | 14.013 | 72.989 | 37.689 | 1.00 | 21.26 | N |
| ATOM | 7343 | CE2 | TRP | C | 93 | 14.014 | 73.886 | 38.723 | 1.00 | 20.27 | C |
| ATOM | 7344 | CE3 | TRP | C | 93 | 12.678 | 74.363 | 40.687 | 1.00 | 18.48 | C |
| ATOM | 7345 | CZ2 | TRP | C | 93 | 14.897 | 74.940 | 39.005 | 1.00 | 17.68 | C |
| ATOM | 7346 | CZ3 | TRP | C | 93 | 13.558 | 75.414 | 40.969 | 1.00 | 17.61 | C |
| ATOM | 7347 | CH2 | TRP | C | 93 | 14.652 | 75.689 | 40.129 | 1.00 | 18.68 | C |
| ATOM | 7348 | N | GLN | C | 94 | 10.452 | 72.456 | 42.339 | 1.00 | 18.83 | N |
| ATOM | 7349 | CA | GLN | C | 94 | 10.579 | 73.342 | 43.495 | 1.00 | 17.74 | C |
| ATOM | 7350 | C | GLN | C | 94 | 10.910 | 72.596 | 44.775 | 1.00 | 17.89 | C |
| ATOM | 7351 | O | GLN | C | 94 | 11.660 | 73.096 | 45.621 | 1.00 | 16.78 | O |
| ATOM | 7352 | CB | GLN | C | 94 | 9.301 | 74.162 | 43.680 | 1.00 | 19.70 | C |
| ATOM | 7353 | CG | GLN | C | 94 | 8.977 | 75.049 | 42.484 | 1.00 | 17.93 | C |
| ATOM | 7354 | CD | GLN | C | 94 | 7.789 | 75.955 | 42.726 | 1.00 | 19.42 | C |
| ATOM | 7355 | OE1 | GLN | C | 94 | 6.788 | 75.545 | 43.324 | 1.00 | 22.08 | O |
| ATOM | 7356 | NE2 | GLN | C | 94 | 7.882 | 77.192 | 42.251 | 1.00 | 18.68 | N |
| ATOM | 7357 | N | VAL | C | 95 | 10.347 | 71.402 | 44.921 | 1.00 | 16.47 | N |
| ATOM | 7358 | CA | VAL | C | 95 | 10.610 | 70.586 | 46.096 | 1.00 | 14.31 | C |
| ATOM | 7359 | C | VAL | C | 95 | 12.094 | 70.218 | 46.086 | 1.00 | 14.13 | C |
| ATOM | 7360 | O | VAL | C | 95 | 12.770 | 70.337 | 47.098 | 1.00 | 17.68 | O |
| ATOM | 7361 | CB | VAL | C | 95 | 9.705 | 69.323 | 46.096 | 1.00 | 14.24 | C |
| ATOM | 7362 | CG1 | VAL | C | 95 | 10.169 | 68.323 | 47.143 | 1.00 | 12.45 | C |
| ATOM | 7363 | CG2 | VAL | C | 95 | 8.258 | 69.743 | 46.389 | 1.00 | 12.25 | C |
| ATOM | 7364 | N | ALA | C | 96 | 12.599 | 69.790 | 44.936 | 1.00 | 14.94 | N |
| ATOM | 7365 | CA | ALA | C | 96 | 14.010 | 69.447 | 44.805 | 1.00 | 15.30 | C |
| ATOM | 7366 | C | ALA | C | 96 | 14.869 | 70.660 | 45.158 | 1.00 | 17.62 | C |
| ATOM | 7367 | O | ALA | C | 96 | 15.887 | 70.547 | 45.851 | 1.00 | 17.77 | O |
| ATOM | 7368 | CB | ALA | C | 96 | 14.316 | 69.015 | 43.378 | 1.00 | 14.32 | C |
| ATOM | 7369 | N | GLY | C | 97 | 14.446 | 71.827 | 44.687 | 1.00 | 17.18 | N |
| ATOM | 7370 | CA | GLY | C | 97 | 15.221 | 73.022 | 44.933 | 1.00 | 16.88 | C |
| ATOM | 7371 | C | GLY | C | 97 | 15.149 | 73.702 | 46.284 | 1.00 | 18.27 | C |
| ATOM | 7372 | O | GLY | C | 97 | 16.138 | 74.296 | 46.710 | 1.00 | 19.90 | O |
| ATOM | 7373 | N | ASP | C | 98 | 14.022 | 73.604 | 46.981 | 1.00 | 17.61 | N |
| ATOM | 7374 | CA | ASP | C | 98 | 13.901 | 74.319 | 48.237 | 1.00 | 17.18 | C |
| ATOM | 7375 | C | ASP | C | 98 | 12.912 | 73.731 | 49.255 | 1.00 | 19.56 | C |
| ATOM | 7376 | O | ASP | C | 98 | 12.582 | 74.398 | 50.241 | 1.00 | 19.76 | O |
| ATOM | 7377 | CB | ASP | C | 98 | 13.515 | 75.766 | 47.895 | 1.00 | 17.88 | C |
| ATOM | 7378 | CG | ASP | C | 98 | 13.905 | 76.764 | 48.966 | 1.00 | 17.44 | C |
| ATOM | 7379 | OD1 | ASP | C | 98 | 14.982 | 76.612 | 49.587 | 1.00 | 16.63 | O |
| ATOM | 7380 | OD2 | ASP | C | 98 | 13.134 | 77.725 | 49.163 | 1.00 | 18.13 | O |
| ATOM | 7381 | N | ALA | C | 99 | 12.448 | 72.497 | 49.044 | 1.00 | 18.41 | N |
| ATOM | 7382 | CA | ALA | C | 99 | 11.496 | 71.901 | 49.987 | 1.00 | 17.92 | C |
| ATOM | 7383 | C | ALA | C | 99 | 11.410 | 70.361 | 50.015 | 1.00 | 18.71 | C |
| ATOM | 7384 | O | ALA | C | 99 | 10.311 | 69.796 | 49.948 | 1.00 | 18.36 | O |
| ATOM | 7385 | CB | ALA | C | 99 | 10.104 | 72.489 | 49.735 | 1.00 | 16.15 | C |
| ATOM | 7386 | N | ASN | C | 100 | 12.548 | 69.677 | 50.108 | 1.00 | 17.81 | N |
| ATOM | 7387 | CA | ASN | C | 100 | 12.522 | 68.217 | 50.160 | 1.00 | 17.17 | C |
| ATOM | 7388 | C | ASN | C | 100 | 13.115 | 67.721 | 51.474 | 1.00 | 17.34 | C |
| ATOM | 7389 | O | ASN | C | 100 | 13.893 | 68.422 | 52.129 | 1.00 | 16.65 | O |
| ATOM | 7390 | CB | ASN | C | 100 | 13.254 | 67.588 | 48.965 | 1.00 | 17.15 | C |
| ATOM | 7391 | CG | ASN | C | 100 | 14.751 | 67.821 | 48.995 | 1.00 | 20.85 | C |
| ATOM | 7392 | OD1 | ASN | C | 100 | 15.267 | 68.719 | 48.322 | 1.00 | 23.24 | O |
| ATOM | 7393 | ND2 | ASN | C | 100 | 15.459 | 67.012 | 49.772 | 1.00 | 18.75 | N |
| ATOM | 7394 | N | LEU | C | 101 | 12.748 | 66.503 | 51.851 | 1.00 | 15.93 | N |
| ATOM | 7395 | CA | LEU | C | 101 | 13.182 | 65.923 | 53.110 | 1.00 | 15.35 | C |
| ATOM | 7396 | C | LEU | C | 101 | 14.679 | 65.638 | 53.309 | 1.00 | 16.05 | C |
| ATOM | 7397 | O | LEU | C | 101 | 15.078 | 65.216 | 54.395 | 1.00 | 13.28 | O |
| ATOM | 7398 | CB | LEU | C | 101 | 12.354 | 64.665 | 53.390 | 1.00 | 15.81 | C |
| ATOM | 7399 | CG | LEU | C | 101 | 10.834 | 64.897 | 53.371 | 1.00 | 18.71 | C |

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ATOM   7400  CD1 LEU C 101     10.095  63.564  53.427  1.00 16.23           C
ATOM   7401  CD2 LEU C 101     10.432  65.789  54.534  1.00 15.88           C
ATOM   7402  N   SER C 102     15.514  65.848  52.293  1.00 14.45           N
ATOM   7403  CA  SER C 102     16.941  65.618  52.507  1.00 16.02           C
ATOM   7404  C   SER C 102     17.561  66.890  53.084  1.00 17.03           C
ATOM   7405  O   SER C 102     18.656  66.860  53.640  1.00 16.75           O
ATOM   7406  CB  SER C 102     17.662  65.261  51.208  1.00 13.66           C
ATOM   7407  OG  SER C 102     17.995  66.431  50.495  1.00 17.74           O
ATOM   7408  N   GLY C 103     16.842  68.003  52.957  1.00 17.80           N
ATOM   7409  CA  GLY C 103     17.341  69.273  53.453  1.00 17.80           C
ATOM   7410  C   GLY C 103     18.305  69.916  52.465  1.00 18.86           C
ATOM   7411  O   GLY C 103     18.793  71.021  52.686  1.00 19.81           O
ATOM   7412  N   HIS C 104     18.579  69.225  51.363  1.00 18.58           N
ATOM   7413  CA  HIS C 104     19.493  69.749  50.356  1.00 17.60           C
ATOM   7414  C   HIS C 104     18.813  70.405  49.162  1.00 18.70           C
ATOM   7415  O   HIS C 104     17.624  70.187  48.902  1.00 18.02           O
ATOM   7416  CB  HIS C 104     20.401  68.635  49.847  1.00 16.45           C
ATOM   7417  CG  HIS C 104     21.484  68.260  50.805  1.00 19.29           C
ATOM   7418  ND1 HIS C 104     21.574  67.007  51.375  1.00 17.55           N
ATOM   7419  CD2 HIS C 104     22.520  68.978  51.301  1.00 16.13           C
ATOM   7420  CE1 HIS C 104     22.619  66.969  52.180  1.00 16.68           C
ATOM   7421  NE2 HIS C 104     23.210  68.151  52.152  1.00 20.40           N
ATOM   7422  N   THR C 105     19.589  71.222  48.451  1.00 18.80           N
ATOM   7423  CA  THR C 105     19.137  71.906  47.243  1.00 17.29           C
ATOM   7424  C   THR C 105     19.559  70.985  46.095  1.00 16.43           C
ATOM   7425  O   THR C 105     20.718  70.567  46.013  1.00 16.05           O
ATOM   7426  CB  THR C 105     19.817  73.294  47.096  1.00 17.95           C
ATOM   7427  OG1 THR C 105     19.355  74.162  48.140  1.00 19.01           O
ATOM   7428  CG2 THR C 105     19.483  73.928  45.744  1.00 18.26           C
ATOM   7429  N   TYR C 106     18.621  70.656  45.218  1.00 16.15           N
ATOM   7430  CA  TYR C 106     18.916  69.747  44.113  1.00 15.63           C
ATOM   7431  C   TYR C 106     18.331  70.166  42.778  1.00 16.18           C
ATOM   7432  O   TYR C 106     17.319  70.864  42.720  1.00 15.80           O
ATOM   7433  CB  TYR C 106     18.330  68.350  44.374  1.00 15.42           C
ATOM   7434  CG  TYR C 106     18.928  67.519  45.478  1.00 14.77           C
ATOM   7435  CD1 TYR C 106     20.290  67.216  45.498  1.00 14.24           C
ATOM   7436  CD2 TYR C 106     18.110  66.946  46.452  1.00 13.93           C
ATOM   7437  CE1 TYR C 106     20.818  66.354  46.457  1.00 15.11           C
ATOM   7438  CE2 TYR C 106     18.627  66.083  47.412  1.00 13.04           C
ATOM   7439  CZ  TYR C 106     19.979  65.789  47.409  1.00 14.42           C
ATOM   7440  OH  TYR C 106     20.488  64.923  48.347  1.00 15.31           O
ATOM   7441  N   PRO C 107     18.975  69.741  41.677  1.00 18.19           N
ATOM   7442  CA  PRO C 107     18.466  70.061  40.343  1.00 18.87           C
ATOM   7443  C   PRO C 107     17.302  69.067  40.161  1.00 19.10           C
ATOM   7444  O   PRO C 107     17.189  68.103  40.917  1.00 16.69           O
ATOM   7445  CB  PRO C 107     19.655  69.761  39.434  1.00 17.45           C
ATOM   7446  CG  PRO C 107     20.391  68.709  40.169  1.00 17.81           C
ATOM   7447  CD  PRO C 107     20.339  69.195  41.593  1.00 16.38           C
ATOM   7448  N   ASP C 108     16.452  69.290  39.169  1.00 19.90           N
ATOM   7449  CA  ASP C 108     15.286  68.435  38.953  1.00 20.72           C
ATOM   7450  C   ASP C 108     15.618  67.066  38.358  1.00 21.51           C
ATOM   7451  O   ASP C 108     15.394  66.836  37.168  1.00 21.19           O
ATOM   7452  CB  ASP C 108     14.302  69.177  38.045  1.00 22.58           C
ATOM   7453  CG  ASP C 108     12.917  68.575  38.063  1.00 21.98           C
ATOM   7454  OD1 ASP C 108     12.656  67.677  38.890  1.00 23.30           O
ATOM   7455  OD2 ASP C 108     12.084  69.017  37.248  1.00 24.06           O
ATOM   7456  N   GLN C 109     16.117  66.153  39.190  1.00 20.43           N
ATOM   7457  CA  GLN C 109     16.504  64.823  38.721  1.00 20.88           C
ATOM   7458  C   GLN C 109     16.136  63.665  39.663  1.00 21.51           C
ATOM   7459  O   GLN C 109     16.878  62.683  39.762  1.00 21.07           O
ATOM   7460  CB  GLN C 109     18.015  64.807  38.463  1.00 18.18           C
ATOM   7461  CG  GLN C 109     18.460  65.875  37.475  1.00 21.28           C
ATOM   7462  CD  GLN C 109     19.954  65.871  37.237  1.00 22.45           C
ATOM   7463  OE1 GLN C 109     20.535  64.858  36.836  1.00 24.00           O
ATOM   7464  NE2 GLN C 109     20.586  67.008  37.481  1.00 23.95           N
ATOM   7465  N   SER C 110     14.997  63.777  40.342  1.00 21.68           N
ATOM   7466  CA  SER C 110     14.551  62.740  41.276  1.00 21.24           C
ATOM   7467  C   SER C 110     15.637  62.337  42.280  1.00 20.52           C
ATOM   7468  O   SER C 110     15.830  61.146  42.549  1.00 20.12           O
ATOM   7469  CB  SER C 110     14.092  61.500  40.506  1.00 19.73           C
ATOM   7470  OG  SER C 110     12.945  61.784  39.725  1.00 21.74           O
ATOM   7471  N   LEU C 111     16.326  63.328  42.843  1.00 19.69           N
ATOM   7472  CA  LEU C 111     17.400  63.078  43.805  1.00 18.81           C
ATOM   7473  C   LEU C 111     16.927  63.024  45.258  1.00 18.85           C
ATOM   7474  O   LEU C 111     17.560  62.391  46.105  1.00 17.11           O
ATOM   7475  CB  LEU C 111     18.482  64.160  43.674  1.00 17.46           C
ATOM   7476  CG  LEU C 111     19.283  64.153  42.368  1.00 20.34           C
ATOM   7477  CD1 LEU C 111     20.229  65.343  42.302  1.00 19.50           C
ATOM   7478  CD2 LEU C 111     20.055  62.855  42.273  1.00 19.03           C
ATOM   7479  N   TYR C 112     15.808  63.681  45.541  1.00 18.70           N
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| ATOM | 7480 | CA | TYR | C | 112 | 15.272 | 63.742 | 46.895 | 1.00 | 16.45 | C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 7481 | C | TYR | C | 112 | 14.458 | 62.517 | 47.323 | 1.00 | 16.25 | C |
| ATOM | 7482 | O | TYR | C | 112 | 14.070 | 61.696 | 46.494 | 1.00 | 17.22 | O |
| ATOM | 7483 | CB | TYR | C | 112 | 14.438 | 65.015 | 47.038 | 1.00 | 16.27 | C |
| ATOM | 7484 | CG | TYR | C | 112 | 13.242 | 65.107 | 46.109 | 1.00 | 17.56 | C |
| ATOM | 7485 | CD1 | TYR | C | 112 | 12.060 | 64.428 | 46.400 | 1.00 | 17.29 | C |
| ATOM | 7486 | CD2 | TYR | C | 112 | 13.282 | 65.900 | 44.954 | 1.00 | 17.69 | C |
| ATOM | 7487 | CE1 | TYR | C | 112 | 10.946 | 64.533 | 45.580 | 1.00 | 17.13 | C |
| ATOM | 7488 | CE2 | TYR | C | 112 | 12.165 | 66.015 | 44.120 | 1.00 | 16.74 | C |
| ATOM | 7489 | CZ | TYR | C | 112 | 10.996 | 65.327 | 44.443 | 1.00 | 18.75 | C |
| ATOM | 7490 | OH | TYR | C | 112 | 9.864 | 65.435 | 43.653 | 1.00 | 16.65 | O |
| ATOM | 7491 | N | PRO | C | 113 | 14.212 | 62.373 | 48.636 | 1.00 | 15.54 | N |
| ATOM | 7492 | CA | PRO | C | 113 | 13.442 | 61.249 | 49.186 | 1.00 | 14.19 | C |
| ATOM | 7493 | C | PRO | C | 113 | 12.025 | 61.217 | 48.598 | 1.00 | 15.32 | C |
| ATOM | 7494 | O | PRO | C | 113 | 11.324 | 62.239 | 48.575 | 1.00 | 14.40 | O |
| ATOM | 7495 | CB | PRO | C | 113 | 13.448 | 61.528 | 50.690 | 1.00 | 14.06 | C |
| ATOM | 7496 | CG | PRO | C | 113 | 14.772 | 62.239 | 50.892 | 1.00 | 15.28 | C |
| ATOM | 7497 | CD | PRO | C | 113 | 14.761 | 63.210 | 49.722 | 1.00 | 16.13 | C |
| ATOM | 7498 | N | ALA | C | 114 | 11.620 | 60.033 | 48.143 | 1.00 | 13.04 | N |
| ATOM | 7499 | CA | ALA | C | 114 | 10.325 | 59.818 | 47.503 | 1.00 | 15.19 | C |
| ATOM | 7500 | C | ALA | C | 114 | 9.084 | 60.257 | 48.274 | 1.00 | 15.75 | C |
| ATOM | 7501 | O | ALA | C | 114 | 8.015 | 60.394 | 47.682 | 1.00 | 15.64 | O |
| ATOM | 7502 | CB | ALA | C | 114 | 10.188 | 58.347 | 47.087 | 1.00 | 13.22 | C |
| ATOM | 7503 | N | ASN | C | 115 | 9.199 | 60.470 | 49.582 | 1.00 | 15.10 | N |
| ATOM | 7504 | CA | ASN | C | 115 | 8.033 | 60.922 | 50.331 | 1.00 | 15.36 | C |
| ATOM | 7505 | C | ASN | C | 115 | 8.035 | 62.444 | 50.519 | 1.00 | 14.82 | C |
| ATOM | 7506 | O | ASN | C | 115 | 7.227 | 62.973 | 51.272 | 1.00 | 15.84 | O |
| ATOM | 7507 | CB | ASN | C | 115 | 7.949 | 60.215 | 51.692 | 1.00 | 14.23 | C |
| ATOM | 7508 | CG | ASN | C | 115 | 9.137 | 60.499 | 52.574 | 1.00 | 15.29 | C |
| ATOM | 7509 | OD1 | ASN | C | 115 | 10.245 | 60.726 | 52.086 | 1.00 | 14.04 | O |
| ATOM | 7510 | ND2 | ASN | C | 115 | 8.921 | 60.466 | 53.889 | 1.00 | 13.65 | N |
| ATOM | 7511 | N | SER | C | 116 | 8.923 | 63.146 | 49.816 | 1.00 | 13.74 | N |
| ATOM | 7512 | CA | SER | C | 116 | 9.002 | 64.605 | 49.944 | 1.00 | 13.60 | C |
| ATOM | 7513 | C | SER | C | 116 | 7.752 | 65.332 | 49.471 | 1.00 | 13.01 | C |
| ATOM | 7514 | O | SER | C | 116 | 7.188 | 66.146 | 50.202 | 1.00 | 15.65 | O |
| ATOM | 7515 | CB | SER | C | 116 | 10.222 | 65.153 | 49.199 | 1.00 | 13.11 | C |
| ATOM | 7516 | OG | SER | C | 116 | 11.422 | 64.750 | 49.839 | 1.00 | 16.08 | O |
| ATOM | 7517 | N | VAL | C | 117 | 7.307 | 65.050 | 48.255 | 1.00 | 12.88 | N |
| ATOM | 7518 | CA | VAL | C | 117 | 6.113 | 65.715 | 47.756 | 1.00 | 13.88 | C |
| ATOM | 7519 | C | VAL | C | 117 | 4.901 | 65.423 | 48.647 | 1.00 | 14.81 | C |
| ATOM | 7520 | O | VAL | C | 117 | 4.199 | 66.346 | 49.040 | 1.00 | 18.18 | O |
| ATOM | 7521 | CB | VAL | C | 117 | 5.849 | 65.337 | 46.284 | 1.00 | 12.16 | C |
| ATOM | 7522 | CG1 | VAL | C | 117 | 4.489 | 65.865 | 45.822 | 1.00 | 10.94 | C |
| ATOM | 7523 | CG2 | VAL | C | 117 | 6.960 | 65.945 | 45.417 | 1.00 | 10.61 | C |
| ATOM | 7524 | N | PRO | C | 118 | 4.650 | 64.143 | 48.993 | 1.00 | 15.08 | N |
| ATOM | 7525 | CA | PRO | C | 118 | 3.497 | 63.857 | 49.854 | 1.00 | 15.17 | C |
| ATOM | 7526 | C | PRO | C | 118 | 3.499 | 64.736 | 51.104 | 1.00 | 16.07 | C |
| ATOM | 7527 | O | PRO | C | 118 | 2.456 | 65.248 | 51.510 | 1.00 | 15.43 | O |
| ATOM | 7528 | CB | PRO | C | 118 | 3.669 | 62.378 | 50.179 | 1.00 | 13.76 | C |
| ATOM | 7529 | CG | PRO | C | 118 | 4.259 | 61.847 | 48.895 | 1.00 | 15.31 | C |
| ATOM | 7530 | CD | PRO | C | 118 | 5.304 | 62.894 | 48.560 | 1.00 | 13.11 | C |
| ATOM | 7531 | N | GLN | C | 119 | 4.672 | 64.920 | 51.706 | 1.00 | 16.62 | N |
| ATOM | 7532 | CA | GLN | C | 119 | 4.784 | 65.761 | 52.896 | 1.00 | 17.46 | C |
| ATOM | 7533 | C | GLN | C | 119 | 4.399 | 67.213 | 52.584 | 1.00 | 16.79 | C |
| ATOM | 7534 | O | GLN | C | 119 | 3.796 | 67.893 | 53.410 | 1.00 | 16.65 | O |
| ATOM | 7535 | CB | GLN | C | 119 | 6.208 | 65.726 | 53.452 | 1.00 | 20.58 | C |
| ATOM | 7536 | CG | GLN | C | 119 | 6.514 | 64.531 | 54.340 | 1.00 | 26.44 | C |
| ATOM | 7537 | CD | GLN | C | 119 | 5.624 | 64.484 | 55.560 | 1.00 | 28.91 | C |
| ATOM | 7538 | OE1 | GLN | C | 119 | 4.492 | 64.003 | 55.501 | 1.00 | 32.16 | O |
| ATOM | 7539 | NE2 | GLN | C | 119 | 6.123 | 65.004 | 56.677 | 1.00 | 32.80 | N |
| ATOM | 7540 | N | VAL | C | 120 | 4.748 | 67.691 | 51.397 | 1.00 | 15.27 | N |
| ATOM | 7541 | CA | VAL | C | 120 | 4.396 | 69.055 | 51.043 | 1.00 | 15.91 | C |
| ATOM | 7542 | C | VAL | C | 120 | 2.894 | 69.136 | 50.757 | 1.00 | 16.52 | C |
| ATOM | 7543 | O | VAL | C | 120 | 2.272 | 70.169 | 51.004 | 1.00 | 15.45 | O |
| ATOM | 7544 | CB | VAL | C | 120 | 5.197 | 69.552 | 49.827 | 1.00 | 14.77 | C |
| ATOM | 7545 | CG1 | VAL | C | 120 | 4.713 | 70.939 | 49.408 | 1.00 | 10.62 | C |
| ATOM | 7546 | CG2 | VAL | C | 120 | 6.676 | 69.612 | 50.190 | 1.00 | 12.80 | C |
| ATOM | 7547 | N | VAL | C | 121 | 2.318 | 68.048 | 50.250 | 1.00 | 14.18 | N |
| ATOM | 7548 | CA | VAL | C | 121 | 0.883 | 68.016 | 49.980 | 1.00 | 14.23 | C |
| ATOM | 7549 | C | VAL | C | 121 | 0.172 | 68.179 | 51.323 | 1.00 | 15.76 | C |
| ATOM | 7550 | O | VAL | C | 121 | -0.695 | 69.035 | 51.471 | 1.00 | 15.25 | O |
| ATOM | 7551 | CB | VAL | C | 121 | 0.449 | 66.674 | 49.348 | 1.00 | 13.81 | C |
| ATOM | 7552 | CG1 | VAL | C | 121 | -1.076 | 66.567 | 49.327 | 1.00 | 12.66 | C |
| ATOM | 7553 | CG2 | VAL | C | 121 | 1.009 | 66.563 | 47.938 | 1.00 | 13.19 | C |
| ATOM | 7554 | N | ARG | C | 122 | 0.554 | 67.352 | 52.297 | 1.00 | 15.27 | N |
| ATOM | 7555 | CA | ARG | C | 122 | -0.029 | 67.405 | 53.634 | 1.00 | 15.60 | C |
| ATOM | 7556 | C | ARG | C | 122 | 0.120 | 68.804 | 54.233 | 1.00 | 15.78 | C |
| ATOM | 7557 | O | ARG | C | 122 | -0.804 | 69.324 | 54.864 | 1.00 | 15.65 | O |
| ATOM | 7558 | CB | ARG | C | 122 | 0.662 | 66.382 | 54.546 | 1.00 | 13.65 | C |
| ATOM | 7559 | CG | ARG | C | 122 | 0.135 | 66.327 | 55.976 | 1.00 | 15.61 | C |

| ATOM | 7560 | CD | ARG C 122 | -1.314 | 65.808 | 56.048 | 1.00 | 15.04 | C |
|------|------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 7561 | NE | ARG C 122 | -2.281 | 66.899 | 56.073 | 1.00 | 16.93 | N |
| ATOM | 7562 | CZ | ARG C 122 | -3.602 | 66.744 | 56.166 | 1.00 | 17.59 | C |
| ATOM | 7563 | NH1 | ARG C 122 | -4.137 | 65.528 | 56.236 | 1.00 | 14.80 | N |
| ATOM | 7564 | NH2 | ARG C 122 | -4.386 | 67.811 | 56.223 | 1.00 | 14.66 | N |
| ATOM | 7565 | N | ARG C 123 | 1.290 | 69.407 | 54.034 | 1.00 | 15.59 | N |
| ATOM | 7566 | CA | ARG C 123 | 1.563 | 70.740 | 54.560 | 1.00 | 16.98 | C |
| ATOM | 7567 | C | ARG C 123 | 0.632 | 71.783 | 53.940 | 1.00 | 16.91 | C |
| ATOM | 7568 | O | ARG C 123 | 0.039 | 72.602 | 54.645 | 1.00 | 17.12 | O |
| ATOM | 7569 | CB | ARG C 123 | 3.036 | 71.109 | 54.318 | 1.00 | 17.74 | C |
| ATOM | 7570 | CG | ARG C 123 | 3.380 | 72.577 | 54.527 | 1.00 | 17.30 | C |
| ATOM | 7571 | CD | ARG C 123 | 2.936 | 73.081 | 55.895 | 1.00 | 17.84 | C |
| ATOM | 7572 | NE | ARG C 123 | 2.955 | 74.542 | 55.937 | 1.00 | 19.18 | N |
| ATOM | 7573 | CZ | ARG C 123 | 2.150 | 75.280 | 56.695 | 1.00 | 18.50 | C |
| ATOM | 7574 | NH1 | ARG C 123 | 1.259 | 74.689 | 57.485 | 1.00 | 17.60 | N |
| ATOM | 7575 | NH2 | ARG C 123 | 2.218 | 76.608 | 56.646 | 1.00 | 16.08 | N |
| ATOM | 7576 | N | ILE C 124 | 0.498 | 71.750 | 52.622 | 1.00 | 17.23 | N |
| ATOM | 7577 | CA | ILE C 124 | -0.378 | 72.695 | 51.947 | 1.00 | 18.09 | C |
| ATOM | 7578 | C | ILE C 124 | -1.816 | 72.550 | 52.450 | 1.00 | 18.12 | C |
| ATOM | 7579 | O | ILE C 124 | -2.489 | 73.547 | 52.716 | 1.00 | 17.47 | O |
| ATOM | 7580 | CB | ILE C 124 | -0.333 | 72.497 | 50.426 | 1.00 | 18.04 | C |
| ATOM | 7581 | CG1 | ILE C 124 | 0.995 | 73.036 | 49.884 | 1.00 | 17.06 | C |
| ATOM | 7582 | CG2 | ILE C 124 | -1.522 | 73.201 | 49.773 | 1.00 | 19.21 | C |
| ATOM | 7583 | CD1 | ILE C 124 | 1.235 | 72.717 | 48.420 | 1.00 | 17.66 | C |
| ATOM | 7584 | N | ASN C 125 | -2.292 | 71.315 | 52.579 | 1.00 | 16.40 | N |
| ATOM | 7585 | CA | ASN C 125 | -3.639 | 71.121 | 53.083 | 1.00 | 17.85 | C |
| ATOM | 7586 | C | ASN C 125 | -3.777 | 71.657 | 54.514 | 1.00 | 18.65 | C |
| ATOM | 7587 | O | ASN C 125 | -4.804 | 72.244 | 54.858 | 1.00 | 18.46 | O |
| ATOM | 7588 | CB | ASN C 125 | -4.041 | 69.642 | 53.028 | 1.00 | 18.22 | C |
| ATOM | 7589 | CG | ASN C 125 | -4.701 | 69.269 | 51.710 | 1.00 | 18.08 | C |
| ATOM | 7590 | OD1 | ASN C 125 | -5.445 | 70.064 | 51.136 | 1.00 | 16.95 | O |
| ATOM | 7591 | ND2 | ASN C 125 | -4.444 | 68.055 | 51.233 | 1.00 | 15.95 | N |
| ATOM | 7592 | N | ASN C 126 | -2.754 | 71.463 | 55.349 | 1.00 | 18.77 | N |
| ATOM | 7593 | CA | ASN C 126 | -2.816 | 71.966 | 56.720 | 1.00 | 17.41 | C |
| ATOM | 7594 | C | ASN C 126 | -2.923 | 73.485 | 56.705 | 1.00 | 18.38 | C |
| ATOM | 7595 | O | ASN C 126 | -3.664 | 74.076 | 57.498 | 1.00 | 19.10 | O |
| ATOM | 7596 | CB | ASN C 126 | -1.576 | 71.576 | 57.530 | 1.00 | 17.46 | C |
| ATOM | 7597 | CG | ASN C 126 | -1.500 | 70.088 | 57.820 | 1.00 | 19.67 | C |
| ATOM | 7598 | OD1 | ASN C 126 | -2.510 | 69.377 | 57.799 | 1.00 | 18.46 | O |
| ATOM | 7599 | ND2 | ASN C 126 | -0.296 | 69.612 | 58.115 | 1.00 | 16.42 | N |
| ATOM | 7600 | N | ALA C 127 | -2.175 | 74.115 | 55.806 | 1.00 | 16.90 | N |
| ATOM | 7601 | CA | ALA C 127 | -2.185 | 75.576 | 55.701 | 1.00 | 18.18 | C |
| ATOM | 7602 | C | ALA C 127 | -3.566 | 76.082 | 55.288 | 1.00 | 16.57 | C |
| ATOM | 7603 | O | ALA C 127 | -4.083 | 77.038 | 55.856 | 1.00 | 15.96 | O |
| ATOM | 7604 | CB | ALA C 127 | -1.138 | 76.039 | 54.696 | 1.00 | 14.63 | C |
| ATOM | 7605 | N | LEU C 128 | -4.157 | 75.428 | 54.297 | 1.00 | 17.25 | N |
| ATOM | 7606 | CA | LEU C 128 | -5.473 | 75.813 | 53.823 | 1.00 | 17.63 | C |
| ATOM | 7607 | C | LEU C 128 | -6.511 | 75.567 | 54.912 | 1.00 | 18.93 | C |
| ATOM | 7608 | O | LEU C 128 | -7.446 | 76.347 | 55.065 | 1.00 | 19.97 | O |
| ATOM | 7609 | CB | LEU C 128 | -5.827 | 75.035 | 52.548 | 1.00 | 14.23 | C |
| ATOM | 7610 | CG | LEU C 128 | -4.880 | 75.285 | 51.368 | 1.00 | 15.87 | C |
| ATOM | 7611 | CD1 | LEU C 128 | -5.350 | 74.475 | 50.169 | 1.00 | 18.57 | C |
| ATOM | 7612 | CD2 | LEU C 128 | -4.842 | 76.777 | 51.017 | 1.00 | 13.18 | C |
| ATOM | 7613 | N | GLN C 129 | -6.339 | 74.496 | 55.680 | 1.00 | 18.67 | N |
| ATOM | 7614 | CA | GLN C 129 | -7.279 | 74.193 | 56.754 | 1.00 | 19.44 | C |
| ATOM | 7615 | C | GLN C 129 | -7.220 | 75.267 | 57.832 | 1.00 | 19.35 | C |
| ATOM | 7616 | O | GLN C 129 | -8.240 | 75.606 | 58.435 | 1.00 | 19.97 | O |
| ATOM | 7617 | CB | GLN C 129 | -6.983 | 72.819 | 57.371 | 1.00 | 20.12 | C |
| ATOM | 7618 | CG | GLN C 129 | -7.412 | 71.643 | 56.501 | 1.00 | 21.93 | C |
| ATOM | 7619 | CD | GLN C 129 | -7.022 | 70.303 | 57.096 | 1.00 | 22.68 | C |
| ATOM | 7620 | OE1 | GLN C 129 | -5.841 | 69.988 | 57.210 | 1.00 | 23.93 | O |
| ATOM | 7621 | NE2 | GLN C 129 | -8.016 | 69.507 | 57.475 | 1.00 | 23.07 | N |
| ATOM | 7622 | N | ARG C 130 | -6.030 | 75.804 | 58.075 | 1.00 | 18.23 | N |
| ATOM | 7623 | CA | ARG C 130 | -5.886 | 76.846 | 59.079 | 1.00 | 18.61 | C |
| ATOM | 7624 | C | ARG C 130 | -6.625 | 78.088 | 58.584 | 1.00 | 19.53 | C |
| ATOM | 7625 | O | ARG C 130 | -7.381 | 78.717 | 59.329 | 1.00 | 18.21 | O |
| ATOM | 7626 | CB | ARG C 130 | -4.411 | 77.183 | 59.315 | 1.00 | 15.27 | C |
| ATOM | 7627 | CG | ARG C 130 | -4.187 | 78.127 | 60.493 | 1.00 | 14.84 | C |
| ATOM | 7628 | CD | ARG C 130 | -4.602 | 77.482 | 61.817 | 1.00 | 16.37 | C |
| ATOM | 7629 | NE | ARG C 130 | -3.590 | 76.556 | 62.327 | 1.00 | 16.87 | N |
| ATOM | 7630 | CZ | ARG C 130 | -3.859 | 75.425 | 62.979 | 1.00 | 17.87 | C |
| ATOM | 7631 | NH1 | ARG C 130 | -5.115 | 75.061 | 63.202 | 1.00 | 15.83 | N |
| ATOM | 7632 | NH2 | ARG C 130 | -2.866 | 74.661 | 63.426 | 1.00 | 16.20 | N |
| ATOM | 7633 | N | ALA C 131 | -6.403 | 78.437 | 57.322 | 1.00 | 19.63 | N |
| ATOM | 7634 | CA | ALA C 131 | -7.065 | 79.598 | 56.736 | 1.00 | 20.75 | C |
| ATOM | 7635 | C | ALA C 131 | -8.580 | 79.406 | 56.815 | 1.00 | 21.14 | C |
| ATOM | 7636 | O | ALA C 131 | -9.321 | 80.327 | 57.139 | 1.00 | 22.07 | O |
| ATOM | 7637 | CB | ALA C 131 | -6.631 | 79.769 | 55.287 | 1.00 | 20.68 | C |
| ATOM | 7638 | N | ASP C 132 | -9.033 | 78.195 | 56.523 | 1.00 | 21.83 | N |
| ATOM | 7639 | CA | ASP C 132 | -10.450 | 77.888 | 56.560 | 1.00 | 22.27 | C |

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ATOM   7640  C    ASP C 132    -10.983  78.090  57.977  1.00 24.58           C
ATOM   7641  O    ASP C 132    -12.051  78.671  58.172  1.00 25.24           O
ATOM   7642  CB   ASP C 132    -10.680  76.447  56.101  1.00 22.42           C
ATOM   7643  CG   ASP C 132    -12.139  76.044  56.152  1.00 23.96           C
ATOM   7644  OD1  ASP C 132    -12.958  76.671  55.443  1.00 24.98           O
ATOM   7645  OD2  ASP C 132    -12.470  75.100  56.902  1.00 23.90           O
ATOM   7646  N    GLN C 133    -10.227  77.617  58.965  1.00 25.06           N
ATOM   7647  CA   GLN C 133    -10.614  77.739  60.368  1.00 23.73           C
ATOM   7648  C    GLN C 133    -10.693  79.200  60.801  1.00 24.05           C
ATOM   7649  O    GLN C 133    -11.617  79.600  61.512  1.00 22.68           O
ATOM   7650  CB   GLN C 133     -9.611  76.993  61.252  1.00 23.40           C
ATOM   7651  CG   GLN C 133     -9.670  75.480  61.113  1.00 21.89           C
ATOM   7652  CD   GLN C 133     -8.334  74.811  61.399  1.00 22.61           C
ATOM   7653  OE1  GLN C 133     -8.210  73.584  61.333  1.00 22.21           O
ATOM   7654  NE2  GLN C 133     -7.326  75.615  61.711  1.00 21.72           N
ATOM   7655  N    ILE C 134     -9.715  79.990  60.369  1.00 23.19           N
ATOM   7656  CA   ILE C 134     -9.670  81.402  60.708  1.00 23.51           C
ATOM   7657  C    ILE C 134    -10.841  82.140  60.053  1.00 25.09           C
ATOM   7658  O    ILE C 134    -11.578  82.871  60.717  1.00 24.71           O
ATOM   7659  CB   ILE C 134     -8.336  82.023  60.254  1.00 21.89           C
ATOM   7660  CG1  ILE C 134     -7.187  81.409  61.057  1.00 21.52           C
ATOM   7661  CG2  ILE C 134     -8.373  83.527  60.432  1.00 20.11           C
ATOM   7662  CD1  ILE C 134     -5.804  81.759  60.536  1.00 20.71           C
ATOM   7663  N    ALA C 135    -11.023  81.930  58.755  1.00 25.31           N
ATOM   7664  CA   ALA C 135    -12.110  82.574  58.027  1.00 26.39           C
ATOM   7665  C    ALA C 135    -13.454  82.318  58.714  1.00 27.37           C
ATOM   7666  O    ALA C 135    -14.292  83.210  58.799  1.00 26.45           O
ATOM   7667  CB   ALA C 135    -12.150  82.062  56.585  1.00 26.08           C
ATOM   7668  N    LYS C 136    -13.654  81.099  59.207  1.00 27.72           N
ATOM   7669  CA   LYS C 136    -14.904  80.756  59.868  1.00 27.23           C
ATOM   7670  C    LYS C 136    -15.127  81.548  61.153  1.00 29.53           C
ATOM   7671  O    LYS C 136    -16.248  81.984  61.422  1.00 30.14           O
ATOM   7672  CB   LYS C 136    -14.959  79.262  60.173  1.00 27.49           C
ATOM   7673  CG   LYS C 136    -16.304  78.805  60.710  1.00 27.41           C
ATOM   7674  CD   LYS C 136    -16.318  77.306  60.949  1.00 29.14           C
ATOM   7675  CE   LYS C 136    -17.717  76.811  61.291  1.00 28.36           C
ATOM   7676  NZ   LYS C 136    -17.738  75.338  61.510  1.00 27.69           N
ATOM   7677  N    ILE C 137    -14.075  81.744  61.946  1.00 29.13           N
ATOM   7678  CA   ILE C 137    -14.230  82.495  63.187  1.00 29.87           C
ATOM   7679  C    ILE C 137    -14.255  83.997  62.941  1.00 30.35           C
ATOM   7680  O    ILE C 137    -14.731  84.753  63.786  1.00 32.32           O
ATOM   7681  CB   ILE C 137    -13.112  82.188  64.221  1.00 29.53           C
ATOM   7682  CG1  ILE C 137    -11.752  82.603  63.671  1.00 31.06           C
ATOM   7683  CG2  ILE C 137    -13.129  80.715  64.586  1.00 28.95           C
ATOM   7684  CD1  ILE C 137    -10.617  82.447  64.666  1.00 32.35           C
ATOM   7685  N    GLU C 138    -13.740  84.436  61.798  1.00 29.52           N
ATOM   7686  CA   GLU C 138    -13.747  85.861  61.482  1.00 30.03           C
ATOM   7687  C    GLU C 138    -14.968  86.199  60.635  1.00 30.98           C
ATOM   7688  O    GLU C 138    -15.147  87.342  60.215  1.00 31.18           O
ATOM   7689  CB   GLU C 138    -12.478  86.264  60.727  1.00 30.09           C
ATOM   7690  CG   GLU C 138    -11.201  86.026  61.501  1.00 30.46           C
ATOM   7691  CD   GLU C 138     -9.977  86.563  60.788  1.00 30.88           C
ATOM   7692  OE1  GLU C 138     -9.901  86.447  59.547  1.00 31.55           O
ATOM   7693  OE2  GLU C 138     -9.076  87.088  61.475  1.00 33.89           O
ATOM   7694  N    GLY C 139    -15.812  85.197  60.399  1.00 32.15           N
ATOM   7695  CA   GLY C 139    -17.005  85.403  59.597  1.00 32.92           C
ATOM   7696  C    GLY C 139    -16.653  85.892  58.205  1.00 34.35           C
ATOM   7697  O    GLY C 139    -17.438  86.592  57.561  1.00 34.89           O
ATOM   7698  N    ASP C 140    -15.460  85.524  57.747  1.00 34.17           N
ATOM   7699  CA   ASP C 140    -14.973  85.915  56.434  1.00 34.35           C
ATOM   7700  C    ASP C 140    -15.456  84.939  55.366  1.00 35.92           C
ATOM   7701  O    ASP C 140    -15.044  83.778  55.345  1.00 36.04           O
ATOM   7702  CB   ASP C 140    -13.444  85.960  56.448  1.00 33.94           C
ATOM   7703  CG   ASP C 140    -12.860  86.265  55.093  1.00 34.42           C
ATOM   7704  OD1  ASP C 140    -13.648  86.383  54.132  1.00 32.55           O
ATOM   7705  OD2  ASP C 140    -11.618  86.380  54.987  1.00 34.07           O
ATOM   7706  N    THR C 141    -16.332  85.418  54.484  1.00 36.45           N
ATOM   7707  CA   THR C 141    -16.871  84.592  53.408  1.00 36.56           C
ATOM   7708  C    THR C 141    -16.227  84.975  52.080  1.00 36.76           C
ATOM   7709  O    THR C 141    -16.731  84.646  51.005  1.00 36.38           O
ATOM   7710  CB   THR C 141    -18.404  84.744  53.300  1.00 37.80           C
ATOM   7711  OG1  THR C 141    -18.741  86.118  53.077  1.00 40.30           O
ATOM   7712  CG2  THR C 141    -19.074  84.272  54.577  1.00 36.53           C
ATOM   7713  N    SER C 142    -15.102  85.675  52.177  1.00 36.58           N
ATOM   7714  CA   SER C 142    -14.334  86.119  51.022  1.00 36.59           C
ATOM   7715  C    SER C 142    -14.011  84.970  50.065  1.00 36.15           C
ATOM   7716  O    SER C 142    -14.088  85.134  48.847  1.00 36.42           O
ATOM   7717  CB   SER C 142    -13.035  86.778  51.505  1.00 37.05           C
ATOM   7718  OG   SER C 142    -12.081  86.906  50.467  1.00 42.50           O
ATOM   7719  N    VAL C 143    -13.645  83.814  50.618  1.00 34.35           N
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ATOM   7720  CA   VAL C 143    -13.302  82.646  49.807  1.00 31.66           C
ATOM   7721  C    VAL C 143    -14.314  81.530  49.996  1.00 32.01           C
ATOM   7722  O    VAL C 143    -14.565  81.078  51.116  1.00 33.26           O
ATOM   7723  CB   VAL C 143    -11.892  82.109  50.156  1.00 31.16           C
ATOM   7724  CG1  VAL C 143    -11.594  80.850  49.353  1.00 28.00           C
ATOM   7725  CG2  VAL C 143    -10.848  83.176  49.864  1.00 28.64           C
ATOM   7726  N    GLU C 144    -14.886  81.082  48.885  1.00 31.93           N
ATOM   7727  CA   GLU C 144    -15.893  80.030  48.901  1.00 32.45           C
ATOM   7728  C    GLU C 144    -15.307  78.683  49.312  1.00 30.56           C
ATOM   7729  O    GLU C 144    -15.870  77.980  50.152  1.00 28.55           O
ATOM   7730  CB   GLU C 144    -16.540  79.906  47.517  1.00 37.01           C
ATOM   7731  CG   GLU C 144    -15.665  79.203  46.481  1.00 43.69           C
ATOM   7732  CD   GLU C 144    -14.323  79.894  46.250  1.00 47.21           C
ATOM   7733  OE1  GLU C 144    -13.361  79.194  45.855  1.00 45.97           O
ATOM   7734  OE2  GLU C 144    -14.232  81.130  46.450  1.00 49.38           O
ATOM   7735  N    ASN C 145    -14.175  78.323  48.719  1.00 28.04           N
ATOM   7736  CA   ASN C 145    -13.541  77.050  49.036  1.00 26.99           C
ATOM   7737  C    ASN C 145    -12.055  77.203  49.342  1.00 24.70           C
ATOM   7738  O    ASN C 145    -11.233  77.303  48.432  1.00 23.34           O
ATOM   7739  CB   ASN C 145    -13.708  76.074  47.874  1.00 27.00           C
ATOM   7740  CG   ASN C 145    -13.134  74.703  48.180  1.00 29.87           C
ATOM   7741  OD1  ASN C 145    -12.683  73.988  47.278  1.00 29.68           O
ATOM   7742  ND2  ASN C 145    -13.162  74.320  49.454  1.00 26.73           N
ATOM   7743  N    TRP C 146    -11.707  77.217  50.623  1.00 23.67           N
ATOM   7744  CA   TRP C 146    -10.305  77.336  50.995  1.00 22.48           C
ATOM   7745  C    TRP C 146     -9.535  76.085  50.615  1.00 22.31           C
ATOM   7746  O    TRP C 146     -8.355  76.160  50.273  1.00 21.36           O
ATOM   7747  CB   TRP C 146    -10.158  77.594  52.489  1.00 22.41           C
ATOM   7748  CG   TRP C 146    -10.295  79.037  52.817  1.00 21.49           C
ATOM   7749  CD1  TRP C 146    -11.390  79.664  53.339  1.00 20.81           C
ATOM   7750  CD2  TRP C 146     -9.319  80.058  52.583  1.00 20.28           C
ATOM   7751  NE1  TRP C 146    -11.156  81.013  53.444  1.00 21.78           N
ATOM   7752  CE2  TRP C 146     -9.893  81.284  52.987  1.00 19.74           C
ATOM   7753  CE3  TRP C 146     -8.013  80.056  52.069  1.00 18.54           C
ATOM   7754  CZ2  TRP C 146     -9.206  82.502  52.893  1.00 21.32           C
ATOM   7755  CZ3  TRP C 146     -7.329  81.268  51.975  1.00 20.20           C
ATOM   7756  CH2  TRP C 146     -7.927  82.474  52.386  1.00 18.12           C
ATOM   7757  N    LEU C 147    -10.214  74.942  50.662  1.00 21.05           N
ATOM   7758  CA   LEU C 147     -9.589  73.669  50.320  1.00 21.49           C
ATOM   7759  C    LEU C 147     -9.512  73.414  48.826  1.00 20.78           C
ATOM   7760  O    LEU C 147    -10.172  72.519  48.301  1.00 20.30           O
ATOM   7761  CB   LEU C 147    -10.331  72.522  50.997  1.00 23.30           C
ATOM   7762  CG   LEU C 147     -9.993  72.402  52.482  1.00 25.73           C
ATOM   7763  CD1  LEU C 147    -10.856  71.328  53.110  1.00 28.94           C
ATOM   7764  CD2  LEU C 147     -8.512  72.064  52.639  1.00 26.07           C
ATOM   7765  N    ALA C 148     -8.694  74.209  48.148  1.00 19.84           N
ATOM   7766  CA   ALA C 148     -8.506  74.075  46.715  1.00 19.50           C
ATOM   7767  C    ALA C 148     -7.839  72.732  46.427  1.00 19.31           C
ATOM   7768  O    ALA C 148     -7.013  72.263  47.207  1.00 18.00           O
ATOM   7769  CB   ALA C 148     -7.637  75.217  46.202  1.00 17.06           C
ATOM   7770  N    PRO C 149     -8.193  72.096  45.302  1.00 18.64           N
ATOM   7771  CA   PRO C 149     -7.609  70.807  44.934  1.00 17.83           C
ATOM   7772  C    PRO C 149     -6.124  70.964  44.597  1.00 19.00           C
ATOM   7773  O    PRO C 149     -5.714  71.948  43.965  1.00 18.25           O
ATOM   7774  CB   PRO C 149     -8.438  70.396  43.721  1.00 18.71           C
ATOM   7775  CG   PRO C 149     -8.721  71.705  43.074  1.00 17.10           C
ATOM   7776  CD   PRO C 149     -9.104  72.573  44.248  1.00 19.90           C
ATOM   7777  N    ILE C 150     -5.324  69.990  45.016  1.00 17.94           N
ATOM   7778  CA   ILE C 150     -3.890  70.026  44.768  1.00 16.99           C
ATOM   7779  C    ILE C 150     -3.486  69.003  43.719  1.00 17.76           C
ATOM   7780  O    ILE C 150     -3.836  67.828  43.829  1.00 20.17           O
ATOM   7781  CB   ILE C 150     -3.103  69.718  46.060  1.00 18.11           C
ATOM   7782  CG1  ILE C 150     -3.508  70.703  47.160  1.00 18.05           C
ATOM   7783  CG2  ILE C 150     -1.605  69.764  45.785  1.00 15.78           C
ATOM   7784  CD1  ILE C 150     -2.985  70.330  48.541  1.00 17.44           C
ATOM   7785  N    VAL C 151     -2.765  69.455  42.696  1.00 17.72           N
ATOM   7786  CA   VAL C 151     -2.267  68.569  41.650  1.00 17.10           C
ATOM   7787  C    VAL C 151     -0.774  68.440  41.961  1.00 18.30           C
ATOM   7788  O    VAL C 151     -0.051  69.440  41.951  1.00 18.34           O
ATOM   7789  CB   VAL C 151     -2.459  69.180  40.243  1.00 18.76           C
ATOM   7790  CG1  VAL C 151     -1.818  68.287  39.194  1.00 17.66           C
ATOM   7791  CG2  VAL C 151     -3.930  69.340  39.944  1.00 17.36           C
ATOM   7792  N    ALA C 152     -0.310  67.225  42.243  1.00 15.83           N
ATOM   7793  CA   ALA C 152      1.089  67.043  42.599  1.00 16.10           C
ATOM   7794  C    ALA C 152      1.937  66.275  41.601  1.00 16.47           C
ATOM   7795  O    ALA C 152      1.449  65.454  40.818  1.00 16.42           O
ATOM   7796  CB   ALA C 152      1.191  66.391  43.982  1.00 17.22           C
ATOM   7797  N    ASP C 153      3.229  66.557  41.661  1.00 16.42           N
ATOM   7798  CA   ASP C 153      4.235  65.958  40.796  1.00 16.79           C
ATOM   7799  C    ASP C 153      4.670  64.577  41.301  1.00 16.90           C
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| ATOM | 7800 | O | ASP C 153 | 5.229 | 64.459 | 42.388 | 1.00 | 17.54 | O |
|------|------|------|------------|-------|--------|--------|------|-------|---|
| ATOM | 7801 | CB | ASP C 153 | 5.443 | 66.889 | 40.762 | 1.00 | 15.73 | C |
| ATOM | 7802 | CG | ASP C 153 | 6.409 | 66.562 | 39.663 | 1.00 | 15.78 | C |
| ATOM | 7803 | OD1 | ASP C 153 | 6.385 | 65.424 | 39.143 | 1.00 | 16.04 | O |
| ATOM | 7804 | OD2 | ASP C 153 | 7.209 | 67.457 | 39.330 | 1.00 | 15.91 | O |
| ATOM | 7805 | N | GLY C 154 | 4.416 | 63.542 | 40.507 | 1.00 | 17.94 | N |
| ATOM | 7806 | CA | GLY C 154 | 4.807 | 62.196 | 40.879 | 1.00 | 18.17 | C |
| ATOM | 7807 | C | GLY C 154 | 6.086 | 61.825 | 40.147 | 1.00 | 19.72 | C |
| ATOM | 7808 | O | GLY C 154 | 6.633 | 60.732 | 40.330 | 1.00 | 18.08 | O |
| ATOM | 7809 | N | GLU C 155 | 6.553 | 62.746 | 39.308 | 1.00 | 17.90 | N |
| ATOM | 7810 | CA | GLU C 155 | 7.774 | 62.566 | 38.526 | 1.00 | 19.57 | C |
| ATOM | 7811 | C | GLU C 155 | 7.776 | 61.250 | 37.765 | 1.00 | 19.23 | C |
| ATOM | 7812 | O | GLU C 155 | 6.852 | 60.970 | 37.013 | 1.00 | 19.42 | O |
| ATOM | 7813 | CB | GLU C 155 | 9.003 | 62.646 | 39.437 | 1.00 | 18.98 | C |
| ATOM | 7814 | CG | GLU C 155 | 9.080 | 63.949 | 40.215 | 1.00 | 22.61 | C |
| ATOM | 7815 | CD | GLU C 155 | 10.476 | 64.264 | 40.692 | 1.00 | 24.41 | C |
| ATOM | 7816 | OE1 | GLU C 155 | 11.361 | 63.404 | 40.528 | 1.00 | 28.06 | O |
| ATOM | 7817 | OE2 | GLU C 155 | 10.692 | 65.371 | 41.232 | 1.00 | 25.25 | O |
| ATOM | 7818 | N | ALA C 156 | 8.815 | 60.446 | 37.959 | 1.00 | 19.80 | N |
| ATOM | 7819 | CA | ALA C 156 | 8.906 | 59.165 | 37.274 | 1.00 | 20.66 | C |
| ATOM | 7820 | C | ALA C 156 | 8.600 | 57.976 | 38.192 | 1.00 | 19.05 | C |
| ATOM | 7821 | O | ALA C 156 | 8.893 | 56.836 | 37.862 | 1.00 | 20.96 | O |
| ATOM | 7822 | CB | ALA C 156 | 10.290 | 59.015 | 36.643 | 1.00 | 19.95 | C |
| ATOM | 7823 | N | GLY C 157 | 8.012 | 58.245 | 39.349 | 1.00 | 19.54 | N |
| ATOM | 7824 | CA | GLY C 157 | 7.671 | 57.168 | 40.263 | 1.00 | 18.64 | C |
| ATOM | 7825 | C | GLY C 157 | 8.768 | 56.683 | 41.195 | 1.00 | 18.78 | C |
| ATOM | 7826 | O | GLY C 157 | 8.495 | 55.897 | 42.097 | 1.00 | 19.78 | O |
| ATOM | 7827 | N | PHE C 158 | 10.005 | 57.125 | 40.977 | 1.00 | 18.65 | N |
| ATOM | 7828 | CA | PHE C 158 | 11.135 | 56.730 | 41.826 | 1.00 | 17.44 | C |
| ATOM | 7829 | C | PHE C 158 | 11.402 | 55.229 | 41.830 | 1.00 | 17.03 | C |
| ATOM | 7830 | O | PHE C 158 | 11.726 | 54.648 | 42.863 | 1.00 | 16.35 | O |
| ATOM | 7831 | CB | PHE C 158 | 10.907 | 57.210 | 43.264 | 1.00 | 15.75 | C |
| ATOM | 7832 | CG | PHE C 158 | 10.925 | 58.712 | 43.413 | 1.00 | 16.29 | C |
| ATOM | 7833 | CD1 | PHE C 158 | 12.108 | 59.382 | 43.695 | 1.00 | 15.20 | C |
| ATOM | 7834 | CD2 | PHE C 158 | 9.754 | 59.454 | 43.262 | 1.00 | 17.27 | C |
| ATOM | 7835 | CE1 | PHE C 158 | 12.130 | 60.777 | 43.831 | 1.00 | 15.83 | C |
| ATOM | 7836 | CE2 | PHE C 158 | 9.761 | 60.846 | 43.392 | 1.00 | 16.81 | C |
| ATOM | 7837 | CZ | PHE C 158 | 10.951 | 61.508 | 43.679 | 1.00 | 17.24 | C |
| ATOM | 7838 | N | GLY C 159 | 11.269 | 54.605 | 40.670 | 1.00 | 15.63 | N |
| ATOM | 7839 | CA | GLY C 159 | 11.501 | 53.182 | 40.584 | 1.00 | 16.40 | C |
| ATOM | 7840 | C | GLY C 159 | 10.496 | 52.500 | 39.684 | 1.00 | 17.02 | C |
| ATOM | 7841 | O | GLY C 159 | 10.126 | 53.030 | 38.634 | 1.00 | 17.47 | O |
| ATOM | 7842 | N | GLY C 160 | 10.051 | 51.321 | 40.104 | 1.00 | 18.43 | N |
| ATOM | 7843 | CA | GLY C 160 | 9.093 | 50.560 | 39.322 | 1.00 | 18.55 | C |
| ATOM | 7844 | C | GLY C 160 | 7.648 | 50.796 | 39.716 | 1.00 | 19.69 | C |
| ATOM | 7845 | O | GLY C 160 | 7.319 | 51.752 | 40.424 | 1.00 | 20.60 | O |
| ATOM | 7846 | N | ALA C 161 | 6.779 | 49.907 | 39.255 | 1.00 | 19.28 | N |
| ATOM | 7847 | CA | ALA C 161 | 5.357 | 50.006 | 39.529 | 1.00 | 18.89 | C |
| ATOM | 7848 | C | ALA C 161 | 5.044 | 50.071 | 41.015 | 1.00 | 18.32 | C |
| ATOM | 7849 | O | ALA C 161 | 4.090 | 50.734 | 41.421 | 1.00 | 19.56 | O |
| ATOM | 7850 | CB | ALA C 161 | 4.627 | 48.823 | 38.894 | 1.00 | 18.84 | C |
| ATOM | 7851 | N | LEU C 162 | 5.838 | 49.381 | 41.825 | 1.00 | 18.02 | N |
| ATOM | 7852 | CA | LEU C 162 | 5.601 | 49.366 | 43.263 | 1.00 | 17.33 | C |
| ATOM | 7853 | C | LEU C 162 | 5.964 | 50.691 | 43.933 | 1.00 | 16.81 | C |
| ATOM | 7854 | O | LEU C 162 | 5.309 | 51.099 | 44.894 | 1.00 | 15.83 | O |
| ATOM | 7855 | CB | LEU C 162 | 6.364 | 48.216 | 43.914 | 1.00 | 17.62 | C |
| ATOM | 7856 | CG | LEU C 162 | 5.983 | 46.814 | 43.435 | 1.00 | 19.60 | C |
| ATOM | 7857 | CD1 | LEU C 162 | 6.801 | 45.794 | 44.204 | 1.00 | 18.88 | C |
| ATOM | 7858 | CD2 | LEU C 162 | 4.494 | 46.563 | 43.643 | 1.00 | 20.86 | C |
| ATOM | 7859 | N | ASN C 163 | 7.002 | 51.357 | 43.435 | 1.00 | 15.27 | N |
| ATOM | 7860 | CA | ASN C 163 | 7.400 | 52.653 | 43.981 | 1.00 | 16.09 | C |
| ATOM | 7861 | C | ASN C 163 | 6.298 | 53.639 | 43.595 | 1.00 | 15.14 | C |
| ATOM | 7862 | O | ASN C 163 | 5.918 | 54.508 | 44.380 | 1.00 | 14.61 | O |
| ATOM | 7863 | CB | ASN C 163 | 8.735 | 53.116 | 43.379 | 1.00 | 15.21 | C |
| ATOM | 7864 | CG | ASN C 163 | 9.903 | 52.245 | 43.805 | 1.00 | 16.18 | C |
| ATOM | 7865 | OD1 | ASN C 163 | 10.459 | 52.420 | 44.891 | 1.00 | 17.51 | O |
| ATOM | 7866 | ND2 | ASN C 163 | 10.270 | 51.290 | 42.959 | 1.00 | 11.50 | N |
| ATOM | 7867 | N | VAL C 164 | 5.801 | 53.490 | 42.370 | 1.00 | 14.82 | N |
| ATOM | 7868 | CA | VAL C 164 | 4.736 | 54.333 | 41.841 | 1.00 | 15.52 | C |
| ATOM | 7869 | C | VAL C 164 | 3.522 | 54.198 | 42.751 | 1.00 | 15.98 | C |
| ATOM | 7870 | O | VAL C 164 | 2.937 | 55.189 | 43.193 | 1.00 | 16.42 | O |
| ATOM | 7871 | CB | VAL C 164 | 4.333 | 53.882 | 40.407 | 1.00 | 16.27 | C |
| ATOM | 7872 | CG1 | VAL C 164 | 3.005 | 54.527 | 39.991 | 1.00 | 15.62 | C |
| ATOM | 7873 | CG2 | VAL C 164 | 5.426 | 54.249 | 39.422 | 1.00 | 13.43 | C |
| ATOM | 7874 | N | TYR C 165 | 3.158 | 52.953 | 43.029 | 1.00 | 16.22 | N |
| ATOM | 7875 | CA | TYR C 165 | 2.019 | 52.663 | 43.877 | 1.00 | 16.27 | C |
| ATOM | 7876 | C | TYR C 165 | 2.151 | 53.340 | 45.244 | 1.00 | 16.78 | C |
| ATOM | 7877 | O | TYR C 165 | 1.224 | 54.006 | 45.706 | 1.00 | 17.20 | O |
| ATOM | 7878 | CB | TYR C 165 | 1.868 | 51.146 | 44.036 | 1.00 | 14.98 | C |
| ATOM | 7879 | CG | TYR C 165 | 0.685 | 50.742 | 44.890 | 1.00 | 15.80 | C |

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ATOM   7880  CD1 TYR C 165      0.754  50.789  46.284  1.00 14.17           C
ATOM   7881  CD2 TYR C 165     -0.528  50.379  44.302  1.00 16.20           C
ATOM   7882  CE1 TYR C 165     -0.356  50.493  47.071  1.00 17.11           C
ATOM   7883  CE2 TYR C 165     -1.646  50.080  45.078  1.00 14.84           C
ATOM   7884  CZ  TYR C 165     -1.558  50.142  46.459  1.00 18.00           C
ATOM   7885  OH  TYR C 165     -2.678  49.888  47.227  1.00 16.87           O
ATOM   7886  N   GLU C 166      3.305  53.183  45.884  1.00 16.79           N
ATOM   7887  CA  GLU C 166      3.526  53.774  47.195  1.00 15.77           C
ATOM   7888  C   GLU C 166      3.491  55.299  47.191  1.00 14.71           C
ATOM   7889  O   GLU C 166      3.021  55.909  48.149  1.00 14.83           O
ATOM   7890  CB  GLU C 166      4.855  53.274  47.781  1.00 17.97           C
ATOM   7891  CG  GLU C 166      4.786  51.844  48.293  1.00 16.35           C
ATOM   7892  CD  GLU C 166      3.621  51.636  49.237  1.00 16.99           C
ATOM   7893  OE1 GLU C 166      3.533  52.374  50.242  1.00 16.40           O
ATOM   7894  OE2 GLU C 166      2.793  50.739  48.975  1.00 15.33           O
ATOM   7895  N   LEU C 167      3.988  55.917  46.124  1.00 13.88           N
ATOM   7896  CA  LEU C 167      3.970  57.374  46.037  1.00 14.37           C
ATOM   7897  C   LEU C 167      2.525  57.876  45.910  1.00 12.36           C
ATOM   7898  O   LEU C 167      2.130  58.809  46.598  1.00 14.37           O
ATOM   7899  CB  LEU C 167      4.812  57.856  44.842  1.00 14.17           C
ATOM   7900  CG  LEU C 167      4.786  59.365  44.564  1.00 16.47           C
ATOM   7901  CD1 LEU C 167      5.070  60.137  45.849  1.00 13.38           C
ATOM   7902  CD2 LEU C 167      5.824  59.711  43.484  1.00 15.90           C
ATOM   7903  N   GLN C 168      1.744  57.246  45.037  1.00 13.22           N
ATOM   7904  CA  GLN C 168      0.343  57.622  44.838  1.00 12.80           C
ATOM   7905  C   GLN C 168     -0.441  57.443  46.144  1.00 14.45           C
ATOM   7906  O   GLN C 168     -1.255  58.284  46.516  1.00 13.31           O
ATOM   7907  CB  GLN C 168     -0.277  56.750  43.743  1.00 13.04           C
ATOM   7908  CG  GLN C 168     -1.766  56.987  43.525  1.00 13.86           C
ATOM   7909  CD  GLN C 168     -2.074  58.286  42.779  1.00 17.29           C
ATOM   7910  OE1 GLN C 168     -1.557  59.361  43.113  1.00 16.04           O
ATOM   7911  NE2 GLN C 168     -2.935  58.189  41.766  1.00 13.57           N
ATOM   7912  N   LYS C 169     -0.185  56.335  46.836  1.00 13.89           N
ATOM   7913  CA  LYS C 169     -0.846  56.050  48.100  1.00 13.48           C
ATOM   7914  C   LYS C 169     -0.477  57.111  49.137  1.00 14.00           C
ATOM   7915  O   LYS C 169     -1.321  57.547  49.921  1.00 15.49           O
ATOM   7916  CB  LYS C 169     -0.443  54.648  48.595  1.00 14.53           C
ATOM   7917  CG  LYS C 169     -0.954  54.282  49.986  1.00 14.63           C
ATOM   7918  CD  LYS C 169     -0.544  52.860  50.351  1.00 14.94           C
ATOM   7919  CE  LYS C 169     -0.859  52.543  51.800  1.00 17.38           C
ATOM   7920  NZ  LYS C 169     -0.579  51.116  52.125  1.00 18.71           N
ATOM   7921  N   ALA C 170      0.783  57.531  49.141  1.00 13.11           N
ATOM   7922  CA  ALA C 170      1.226  58.543  50.089  1.00 13.65           C
ATOM   7923  C   ALA C 170      0.616  59.910  49.757  1.00 13.40           C
ATOM   7924  O   ALA C 170      0.218  60.661  50.652  1.00 13.24           O
ATOM   7925  CB  ALA C 170      2.759  58.626  50.090  1.00 13.24           C
ATOM   7926  N   LEU C 171      0.557  60.230  48.467  1.00 12.87           N
ATOM   7927  CA  LEU C 171     -0.013  61.496  48.017  1.00 13.66           C
ATOM   7928  C   LEU C 171     -1.479  61.566  48.428  1.00 14.90           C
ATOM   7929  O   LEU C 171     -1.969  62.617  48.852  1.00 14.38           O
ATOM   7930  CB  LEU C 171      0.087  61.621  46.494  1.00 13.01           C
ATOM   7931  CG  LEU C 171      1.484  61.794  45.899  1.00 12.61           C
ATOM   7932  CD1 LEU C 171      1.393  61.762  44.389  1.00 11.74           C
ATOM   7933  CD2 LEU C 171      2.093  63.118  46.372  1.00 13.13           C
ATOM   7934  N   ILE C 172     -2.174  60.439  48.295  1.00 14.67           N
ATOM   7935  CA  ILE C 172     -3.580  60.369  48.656  1.00 14.76           C
ATOM   7936  C   ILE C 172     -3.778  60.526  50.159  1.00 15.21           C
ATOM   7937  O   ILE C 172     -4.686  61.234  50.597  1.00 16.04           O
ATOM   7938  CB  ILE C 172     -4.205  59.038  48.195  1.00 15.43           C
ATOM   7939  CG1 ILE C 172     -4.343  59.040  46.672  1.00 13.67           C
ATOM   7940  CG2 ILE C 172     -5.572  58.837  48.859  1.00 13.85           C
ATOM   7941  CD1 ILE C 172     -4.714  57.702  46.095  1.00  9.94           C
ATOM   7942  N   ALA C 173     -2.931  59.873  50.950  1.00 14.57           N
ATOM   7943  CA  ALA C 173     -3.053  59.972  52.395  1.00 14.93           C
ATOM   7944  C   ALA C 173     -2.848  61.429  52.831  1.00 17.20           C
ATOM   7945  O   ALA C 173     -3.408  61.872  53.833  1.00 18.29           O
ATOM   7946  CB  ALA C 173     -2.042  59.060  53.070  1.00 14.74           C
ATOM   7947  N   ALA C 174     -2.061  62.175  52.061  1.00 17.81           N
ATOM   7948  CA  ALA C 174     -1.788  63.578  52.370  1.00 16.39           C
ATOM   7949  C   ALA C 174     -2.900  64.487  51.861  1.00 15.99           C
ATOM   7950  O   ALA C 174     -2.906  65.682  52.147  1.00 14.40           O
ATOM   7951  CB  ALA C 174     -0.440  64.006  51.772  1.00 16.03           C
ATOM   7952  N   GLY C 175     -3.831  63.917  51.100  1.00 16.85           N
ATOM   7953  CA  GLY C 175     -4.960  64.684  50.596  1.00 13.85           C
ATOM   7954  C   GLY C 175     -4.809  65.317  49.228  1.00 15.67           C
ATOM   7955  O   GLY C 175     -5.336  66.405  48.995  1.00 16.07           O
ATOM   7956  N   VAL C 176     -4.103  64.647  48.321  1.00 15.38           N
ATOM   7957  CA  VAL C 176     -3.894  65.169  46.971  1.00 14.78           C
ATOM   7958  C   VAL C 176     -5.174  64.977  46.161  1.00 16.76           C
ATOM   7959  O   VAL C 176     -5.971  64.083  46.456  1.00 16.94           O
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| ATOM | 7960 | CB | VAL | C | 176 | -2.725 | 64.425 | 46.255 | 1.00 | 14.98 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 7961 | CG1 | VAL | C | 176 | -3.211 | 63.095 | 45.689 | 1.00 | 13.23 | C |
| ATOM | 7962 | CG2 | VAL | C | 176 | -2.139 | 65.291 | 45.154 | 1.00 | 15.21 | C |
| ATOM | 7963 | N | ALA | C | 177 | -5.368 | 65.812 | 45.144 | 1.00 | 17.01 | N |
| ATOM | 7964 | CA | ALA | C | 177 | -6.551 | 65.721 | 44.294 | 1.00 | 18.60 | C |
| ATOM | 7965 | C | ALA | C | 177 | -6.207 | 65.035 | 42.975 | 1.00 | 19.29 | C |
| ATOM | 7966 | O | ALA | C | 177 | -7.016 | 64.287 | 42.417 | 1.00 | 18.62 | O |
| ATOM | 7967 | CB | ALA | C | 177 | -7.116 | 67.119 | 44.023 | 1.00 | 19.05 | C |
| ATOM | 7968 | N | GLY | C | 178 | -5.003 | 65.305 | 42.480 | 1.00 | 18.20 | N |
| ATOM | 7969 | CA | GLY | C | 178 | -4.553 | 64.715 | 41.234 | 1.00 | 18.43 | C |
| ATOM | 7970 | C | GLY | C | 178 | -3.041 | 64.601 | 41.251 | 1.00 | 18.04 | C |
| ATOM | 7971 | O | GLY | C | 178 | -2.381 | 65.295 | 42.017 | 1.00 | 18.79 | O |
| ATOM | 7972 | N | SER | C | 179 | -2.489 | 63.728 | 40.417 | 1.00 | 17.74 | N |
| ATOM | 7973 | CA | SER | C | 179 | -1.043 | 63.542 | 40.362 | 1.00 | 17.44 | C |
| ATOM | 7974 | C | SER | C | 179 | -0.629 | 63.217 | 38.937 | 1.00 | 16.54 | C |
| ATOM | 7975 | O | SER | C | 179 | -1.379 | 62.574 | 38.206 | 1.00 | 15.36 | O |
| ATOM | 7976 | CB | SER | C | 179 | -0.626 | 62.405 | 41.305 | 1.00 | 17.27 | C |
| ATOM | 7977 | OG | SER | C | 179 | -1.371 | 61.225 | 41.046 | 1.00 | 17.18 | O |
| ATOM | 7978 | N | HIS | C | 180 | 0.560 | 63.663 | 38.534 | 1.00 | 18.15 | N |
| ATOM | 7979 | CA | HIS | C | 180 | 1.029 | 63.390 | 37.182 | 1.00 | 16.61 | C |
| ATOM | 7980 | C | HIS | C | 180 | 2.263 | 62.506 | 37.151 | 1.00 | 15.98 | C |
| ATOM | 7981 | O | HIS | C | 180 | 3.083 | 62.526 | 38.067 | 1.00 | 16.81 | O |
| ATOM | 7982 | CB | HIS | C | 180 | 1.269 | 64.692 | 36.396 | 1.00 | 16.79 | C |
| ATOM | 7983 | CG | HIS | C | 180 | 2.399 | 65.533 | 36.903 | 1.00 | 16.66 | C |
| ATOM | 7984 | ND1 | HIS | C | 180 | 2.199 | 66.664 | 37.665 | 1.00 | 19.45 | N |
| ATOM | 7985 | CD2 | HIS | C | 180 | 3.732 | 65.466 | 36.675 | 1.00 | 18.10 | C |
| ATOM | 7986 | CE1 | HIS | C | 180 | 3.358 | 67.262 | 37.876 | 1.00 | 19.15 | C |
| ATOM | 7987 | NE2 | HIS | C | 180 | 4.304 | 66.555 | 37.285 | 1.00 | 18.58 | N |
| ATOM | 7988 | N | TRP | C | 181 | 2.378 | 61.731 | 36.078 | 1.00 | 14.97 | N |
| ATOM | 7989 | CA | TRP | C | 181 | 3.457 | 60.767 | 35.909 | 1.00 | 15.34 | C |
| ATOM | 7990 | C | TRP | C | 181 | 4.035 | 60.843 | 34.497 | 1.00 | 16.07 | C |
| ATOM | 7991 | O | TRP | C | 181 | 3.294 | 60.875 | 33.513 | 1.00 | 16.94 | O |
| ATOM | 7992 | CB | TRP | C | 181 | 2.902 | 59.363 | 36.195 | 1.00 | 15.85 | C |
| ATOM | 7993 | CG | TRP | C | 181 | 2.046 | 59.332 | 37.437 | 1.00 | 15.56 | C |
| ATOM | 7994 | CD1 | TRP | C | 181 | 0.751 | 59.757 | 37.549 | 1.00 | 14.69 | C |
| ATOM | 7995 | CD2 | TRP | C | 181 | 2.467 | 58.977 | 38.766 | 1.00 | 15.79 | C |
| ATOM | 7996 | NE1 | TRP | C | 181 | 0.343 | 59.701 | 38.862 | 1.00 | 17.23 | N |
| ATOM | 7997 | CE2 | TRP | C | 181 | 1.375 | 59.228 | 39.631 | 1.00 | 16.59 | C |
| ATOM | 7998 | CE3 | TRP | C | 181 | 3.659 | 58.479 | 39.310 | 1.00 | 15.31 | C |
| ATOM | 7999 | CZ2 | TRP | C | 181 | 1.442 | 58.999 | 41.015 | 1.00 | 16.02 | C |
| ATOM | 8000 | CZ3 | TRP | C | 181 | 3.725 | 58.251 | 40.692 | 1.00 | 13.67 | C |
| ATOM | 8001 | CH2 | TRP | C | 181 | 2.624 | 58.513 | 41.524 | 1.00 | 15.39 | C |
| ATOM | 8002 | N | GLU | C | 182 | 5.362 | 60.861 | 34.409 | 1.00 | 16.35 | N |
| ATOM | 8003 | CA | GLU | C | 182 | 6.064 | 60.980 | 33.134 | 1.00 | 16.76 | C |
| ATOM | 8004 | C | GLU | C | 182 | 6.780 | 59.703 | 32.703 | 1.00 | 18.41 | C |
| ATOM | 8005 | O | GLU | C | 182 | 7.252 | 58.925 | 33.534 | 1.00 | 19.59 | O |
| ATOM | 8006 | CB | GLU | C | 182 | 7.073 | 62.121 | 33.233 | 1.00 | 18.81 | C |
| ATOM | 8007 | CG | GLU | C | 182 | 8.096 | 61.901 | 34.346 | 1.00 | 17.56 | C |
| ATOM | 8008 | CD | GLU | C | 182 | 8.607 | 63.196 | 34.909 | 1.00 | 19.95 | C |
| ATOM | 8009 | OE1 | GLU | C | 182 | 7.768 | 64.074 | 35.205 | 1.00 | 23.16 | O |
| ATOM | 8010 | OE2 | GLU | C | 182 | 9.837 | 63.338 | 35.066 | 1.00 | 20.70 | O |
| ATOM | 8011 | N | ASP | C | 183 | 6.883 | 59.517 | 31.392 | 1.00 | 18.72 | N |
| ATOM | 8012 | CA | ASP | C | 183 | 7.511 | 58.336 | 30.823 | 1.00 | 19.41 | C |
| ATOM | 8013 | C | ASP | C | 183 | 9.036 | 58.386 | 30.702 | 1.00 | 21.66 | C |
| ATOM | 8014 | O | ASP | C | 183 | 9.590 | 58.085 | 29.646 | 1.00 | 22.70 | O |
| ATOM | 8015 | CB | ASP | C | 183 | 6.898 | 58.033 | 29.453 | 1.00 | 19.63 | C |
| ATOM | 8016 | CG | ASP | C | 183 | 6.888 | 59.241 | 28.528 | 1.00 | 20.68 | C |
| ATOM | 8017 | OD1 | ASP | C | 183 | 7.635 | 60.205 | 28.785 | 1.00 | 23.31 | O |
| ATOM | 8018 | OD2 | ASP | C | 183 | 6.138 | 59.221 | 27.528 | 1.00 | 23.02 | O |
| ATOM | 8019 | N | GLN | C | 184 | 9.711 | 58.754 | 31.787 | 1.00 | 23.18 | N |
| ATOM | 8020 | CA | GLN | C | 184 | 11.173 | 58.813 | 31.812 | 1.00 | 23.23 | C |
| ATOM | 8021 | C | GLN | C | 184 | 11.742 | 57.731 | 32.721 | 1.00 | 25.33 | C |
| ATOM | 8022 | O | GLN | C | 184 | 11.050 | 57.213 | 33.603 | 1.00 | 25.92 | O |
| ATOM | 8023 | CB | GLN | C | 184 | 11.669 | 60.149 | 32.364 | 1.00 | 23.15 | C |
| ATOM | 8024 | CG | GLN | C | 184 | 11.488 | 61.356 | 31.487 | 1.00 | 21.66 | C |
| ATOM | 8025 | CD | GLN | C | 184 | 12.107 | 62.579 | 32.127 | 1.00 | 22.52 | C |
| ATOM | 8026 | OE1 | GLN | C | 184 | 13.302 | 62.596 | 32.408 | 1.00 | 21.42 | O |
| ATOM | 8027 | NE2 | GLN | C | 184 | 11.298 | 63.604 | 32.371 | 1.00 | 20.44 | N |
| ATOM | 8028 | N | LEU | C | 185 | 13.010 | 57.396 | 32.504 | 1.00 | 25.39 | N |
| ATOM | 8029 | CA | LEU | C | 185 | 13.688 | 56.426 | 33.348 | 1.00 | 25.65 | C |
| ATOM | 8030 | C | LEU | C | 185 | 13.911 | 57.178 | 34.662 | 1.00 | 25.92 | C |
| ATOM | 8031 | O | LEU | C | 185 | 14.522 | 58.253 | 34.673 | 1.00 | 26.84 | O |
| ATOM | 8032 | CB | LEU | C | 185 | 15.029 | 56.026 | 32.731 | 1.00 | 26.15 | C |
| ATOM | 8033 | CG | LEU | C | 185 | 15.920 | 55.095 | 33.556 | 1.00 | 25.73 | C |
| ATOM | 8034 | CD1 | LEU | C | 185 | 15.168 | 53.820 | 33.922 | 1.00 | 23.88 | C |
| ATOM | 8035 | CD2 | LEU | C | 185 | 17.167 | 54.775 | 32.757 | 1.00 | 25.54 | C |
| ATOM | 8036 | N | ALA | C | 186 | 13.397 | 56.631 | 35.759 | 1.00 | 24.72 | N |
| ATOM | 8037 | CA | ALA | C | 186 | 13.517 | 57.279 | 37.059 | 1.00 | 25.95 | C |
| ATOM | 8038 | C | ALA | C | 186 | 14.961 | 57.596 | 37.448 | 1.00 | 25.78 | C |
| ATOM | 8039 | O | ALA | C | 186 | 15.269 | 58.725 | 37.831 | 1.00 | 24.63 | O |

| ATOM | 8040 | CB | ALA C | 186 | 12.856 | 56.423 | 38.134 | 1.00 | 24.17 | C |
|------|------|-----|-------|-----|--------|--------|--------|------|-------|---|
| ATOM | 8041 | N | SER C | 187 | 15.841 | 56.606 | 37.333 | 1.00 | 26.10 | N |
| ATOM | 8042 | CA | SER C | 187 | 17.249 | 56.778 | 37.685 | 1.00 | 26.96 | C |
| ATOM | 8043 | C | SER C | 187 | 17.974 | 57.877 | 36.900 | 1.00 | 27.58 | C |
| ATOM | 8044 | O | SER C | 187 | 19.032 | 58.340 | 37.318 | 1.00 | 28.39 | O |
| ATOM | 8045 | CB | SER C | 187 | 17.991 | 55.448 | 37.515 | 1.00 | 26.23 | C |
| ATOM | 8046 | OG | SER C | 187 | 17.871 | 54.959 | 36.192 | 1.00 | 27.65 | O |
| ATOM | 8047 | N | GLU C | 188 | 17.416 | 58.289 | 35.766 | 1.00 | 27.25 | N |
| ATOM | 8048 | CA | GLU C | 188 | 18.033 | 59.340 | 34.956 | 1.00 | 28.98 | C |
| ATOM | 8049 | C | GLU C | 188 | 17.041 | 60.476 | 34.722 | 1.00 | 29.37 | C |
| ATOM | 8050 | O | GLU C | 188 | 17.199 | 61.265 | 33.788 | 1.00 | 30.64 | O |
| ATOM | 8051 | CB | GLU C | 188 | 18.479 | 58.788 | 33.599 | 1.00 | 28.90 | C |
| ATOM | 8052 | CG | GLU C | 188 | 19.465 | 57.641 | 33.652 | 1.00 | 29.50 | C |
| ATOM | 8053 | CD | GLU C | 188 | 20.785 | 58.032 | 34.280 | 1.00 | 31.81 | C |
| ATOM | 8054 | OE1 | GLU C | 188 | 21.244 | 59.173 | 34.055 | 1.00 | 33.88 | O |
| ATOM | 8055 | OE2 | GLU C | 188 | 21.373 | 57.190 | 34.988 | 1.00 | 32.43 | O |
| ATOM | 8056 | N | LYS C | 189 | 16.017 | 60.543 | 35.569 | 1.00 | 29.47 | N |
| ATOM | 8057 | CA | LYS C | 189 | 14.983 | 61.564 | 35.466 | 1.00 | 28.92 | C |
| ATOM | 8058 | C | LYS C | 189 | 15.590 | 62.946 | 35.285 | 1.00 | 31.09 | C |
| ATOM | 8059 | O | LYS C | 189 | 16.514 | 63.339 | 36.003 | 1.00 | 31.66 | O |
| ATOM | 8060 | CB | LYS C | 189 | 14.091 | 61.537 | 36.715 | 1.00 | 27.91 | C |
| ATOM | 8061 | CG | LYS C | 189 | 12.927 | 62.525 | 36.724 | 1.00 | 26.92 | C |
| ATOM | 8062 | CD | LYS C | 189 | 13.376 | 63.942 | 37.074 | 1.00 | 27.77 | C |
| ATOM | 8063 | CE | LYS C | 189 | 12.193 | 64.845 | 37.425 | 1.00 | 27.59 | C |
| ATOM | 8064 | NZ | LYS C | 189 | 11.271 | 65.074 | 36.276 | 1.00 | 27.00 | N |
| ATOM | 8065 | N | LYS C | 190 | 15.065 | 63.675 | 34.307 | 1.00 | 32.34 | N |
| ATOM | 8066 | CA | LYS C | 190 | 15.525 | 65.025 | 34.008 | 1.00 | 33.83 | C |
| ATOM | 8067 | C | LYS C | 190 | 14.324 | 65.947 | 34.026 | 1.00 | 34.53 | C |
| ATOM | 8068 | O | LYS C | 190 | 13.184 | 65.509 | 33.845 | 1.00 | 34.10 | O |
| ATOM | 8069 | CB | LYS C | 190 | 16.164 | 65.095 | 32.618 | 1.00 | 33.81 | C |
| ATOM | 8070 | CG | LYS C | 190 | 17.431 | 64.286 | 32.443 | 1.00 | 34.30 | C |
| ATOM | 8071 | CD | LYS C | 190 | 18.556 | 64.830 | 33.290 | 1.00 | 33.90 | C |
| ATOM | 8072 | CE | LYS C | 190 | 19.853 | 64.146 | 32.923 | 1.00 | 35.26 | C |
| ATOM | 8073 | NZ | LYS C | 190 | 19.723 | 62.663 | 32.989 | 1.00 | 36.28 | N |
| ATOM | 8074 | N | SER C | 191 | 14.587 | 67.228 | 34.251 | 1.00 | 35.61 | N |
| ATOM | 8075 | CA | SER C | 191 | 13.529 | 68.219 | 34.258 | 1.00 | 34.70 | C |
| ATOM | 8076 | C | SER C | 191 | 13.044 | 68.290 | 32.820 | 1.00 | 34.94 | C |
| ATOM | 8077 | O | SER C | 191 | 13.827 | 68.097 | 31.885 | 1.00 | 34.85 | O- |
| ATOM | 8078 | CB | SER C | 191 | 14.080 | 69.570 | 34.690 | 1.00 | 36.26 | C |
| ATOM | 8079 | OG | SER C | 191 | 13.051 | 70.529 | 34.752 | 1.00 | 38.60 | O |
| ATOM | 8080 | N | GLY C | 192 | 11.758 | 68.557 | 32.644 | 1.00 | 35.06 | N |
| ATOM | 8081 | CA | GLY C | 192 | 11.195 | 68.631 | 31.307 | 1.00 | 35.23 | C |
| ATOM | 8082 | C | GLY C | 192 | 12.000 | 69.439 | 30.305 | 1.00 | 34.93 | C |
| ATOM | 8083 | O | GLY C | 192 | 12.039 | 69.099 | 29.121 | 1.00 | 35.90 | O |
| ATOM | 8084 | N | HIS C | 193 | 12.661 | 70.495 | 30.768 | 1.00 | 34.78 | N |
| ATOM | 8085 | CA | HIS C | 193 | 13.433 | 71.339 | 29.866 | 1.00 | 34.60 | C |
| ATOM | 8086 | C | HIS C | 193 | 14.953 | 71.267 | 30.000 | 1.00 | 34.58 | C |
| ATOM | 8087 | O | HIS C | 193 | 15.664 | 72.215 | 29.668 | 1.00 | 34.36 | O |
| ATOM | 8088 | CB | HIS C | 193 | 12.929 | 72.776 | 29.987 | 1.00 | 33.48 | C |
| ATOM | 8089 | CG | HIS C | 193 | 11.451 | 72.894 | 29.771 | 1.00 | 32.65 | C |
| ATOM | 8090 | ND1 | HIS C | 193 | 10.542 | 72.860 | 30.806 | 1.00 | 30.08 | N |
| ATOM | 8091 | CD2 | HIS C | 193 | 10.719 | 72.922 | 28.631 | 1.00 | 32.14 | C |
| ATOM | 8092 | CE1 | HIS C | 193 | 9.316 | 72.856 | 30.315 | 1.00 | 30.68 | C |
| ATOM | 8093 | NE2 | HIS C | 193 | 9.396 | 72.891 | 28.996 | 1.00 | 29.17 | N |
| ATOM | 8094 | N | LEU C | 194 | 15.442 | 70.127 | 30.483 | 1.00 | 34.98 | N |
| ATOM | 8095 | CA | LEU C | 194 | 16.878 | 69.885 | 30.621 | 1.00 | 34.00 | C |
| ATOM | 8096 | C | LEU C | 194 | 17.192 | 68.795 | 29.604 | 1.00 | 34.73 | C |
| ATOM | 8097 | O | LEU C | 194 | 16.288 | 68.073 | 29.173 | 1.00 | 34.18 | O |
| ATOM | 8098 | CB | LEU C | 194 | 17.230 | 69.382 | 32.030 | 1.00 | 33.68 | C |
| ATOM | 8099 | CG | LEU C | 194 | 17.200 | 70.362 | 33.214 | 1.00 | 34.87 | C |
| ATOM | 8100 | CD1 | LEU C | 194 | 17.574 | 69.633 | 34.506 | 1.00 | 35.09 | C |
| ATOM | 8101 | CD2 | LEU C | 194 | 18.173 | 71.498 | 32.957 | 1.00 | 33.51 | C |
| ATOM | 8102 | N | GLY C | 195 | 18.460 | 68.670 | 29.221 | 1.00 | 34.51 | N |
| ATOM | 8103 | CA | GLY C | 195 | 18.835 | 67.649 | 28.258 | 1.00 | 34.98 | C |
| ATOM | 8104 | C | GLY C | 195 | 19.155 | 66.296 | 28.876 | 1.00 | 34.93 | C |
| ATOM | 8105 | O | GLY C | 195 | 19.112 | 66.130 | 30.097 | 1.00 | 36.58 | O |
| ATOM | 8106 | N | GLY C | 196 | 19.466 | 65.324 | 28.020 | 1.00 | 34.19 | N |
| ATOM | 8107 | CA | GLY C | 196 | 19.806 | 63.987 | 28.473 | 1.00 | 32.66 | C |
| ATOM | 8108 | C | GLY C | 196 | 18.654 | 63.158 | 29.010 | 1.00 | 32.10 | C |
| ATOM | 8109 | O | GLY C | 196 | 18.870 | 62.274 | 29.838 | 1.00 | 33.72 | O |
| ATOM | 8110 | N | LYS C | 197 | 17.435 | 63.428 | 28.546 | 1.00 | 29.16 | N |
| ATOM | 8111 | CA | LYS C | 197 | 16.270 | 62.687 | 29.022 | 1.00 | 25.67 | C |
| ATOM | 8112 | C | LYS C | 197 | 16.204 | 61.304 | 28.388 | 1.00 | 24.39 | C |
| ATOM | 8113 | O | LYS C | 197 | 16.490 | 61.133 | 27.198 | 1.00 | 22.74 | O |
| ATOM | 8114 | CB | LYS C | 197 | 14.976 | 63.470 | 28.741 | 1.00 | 24.16 | C |
| ATOM | 8115 | CG | LYS C | 197 | 14.947 | 64.846 | 29.407 | 1.00 | 25.50 | C |
| ATOM | 8116 | CD | LYS C | 197 | 13.553 | 65.466 | 29.463 | 1.00 | 24.91 | C |
| ATOM | 8117 | CE | LYS C | 197 | 12.992 | 65.752 | 28.084 | 1.00 | 24.00 | C |
| ATOM | 8118 | NZ | LYS C | 197 | 11.659 | 66.421 | 28.175 | 1.00 | 23.77 | N |
| ATOM | 8119 | N | VAL C | 198 | 15.839 | 60.315 | 29.196 | 1.00 | 23.18 | N |

| ATOM | 8120 | CA  | VAL | C | 198 | 15.742  | 58.940 | 28.729 | 1.00 | 21.30 | C |
|------|------|-----|-----|---|-----|---------|--------|--------|------|-------|---|
| ATOM | 8121 | C   | VAL | C | 198 | 14.320  | 58.436 | 28.943 | 1.00 | 21.49 | C |
| ATOM | 8122 | O   | VAL | C | 198 | 13.826  | 58.402 | 30.071 | 1.00 | 22.24 | O |
| ATOM | 8123 | CB  | VAL | C | 198 | 16.728  | 58.037 | 29.490 | 1.00 | 22.43 | C |
| ATOM | 8124 | CG1 | VAL | C | 198 | 16.696  | 56.627 | 28.918 | 1.00 | 24.31 | C |
| ATOM | 8125 | CG2 | VAL | C | 198 | 18.133  | 58.614 | 29.401 | 1.00 | 22.39 | C |
| ATOM | 8126 | N   | LEU | C | 199 | 13.656  | 58.060 | 27.855 | 1.00 | 20.15 | N |
| ATOM | 8127 | CA  | LEU | C | 199 | 12.285  | 57.566 | 27.935 | 1.00 | 19.91 | C |
| ATOM | 8128 | C   | LEU | C | 199 | 12.269  | 56.079 | 28.285 | 1.00 | 20.13 | C |
| ATOM | 8129 | O   | LEU | C | 199 | 13.280  | 55.383 | 28.145 | 1.00 | 20.05 | O |
| ATOM | 8130 | CB  | LEU | C | 199 | 11.566  | 57.753 | 26.587 | 1.00 | 17.16 | C |
| ATOM | 8131 | CG  | LEU | C | 199 | 11.414  | 59.131 | 25.933 | 1.00 | 18.35 | C |
| ATOM | 8132 | CD1 | LEU | C | 199 | 10.606  | 58.975 | 24.644 | 1.00 | 17.81 | C |
| ATOM | 8133 | CD2 | LEU | C | 199 | 10.708  | 60.108 | 26.876 | 1.00 | 14.31 | C |
| ATOM | 8134 | N   | ILE | C | 200 | 11.124  | 55.600 | 28.753 | 1.00 | 19.26 | N |
| ATOM | 8135 | CA  | ILE | C | 200 | 10.966  | 54.179 | 29.035 | 1.00 | 19.68 | C |
| ATOM | 8136 | C   | ILE | C | 200 | 9.935   | 53.692 | 28.017 | 1.00 | 19.40 | C |
| ATOM | 8137 | O   | ILE | C | 200 | 9.272   | 54.503 | 27.363 | 1.00 | 17.99 | O |
| ATOM | 8138 | CB  | ILE | C | 200 | 10.491  | 53.904 | 30.491 | 1.00 | 18.99 | C |
| ATOM | 8139 | CG1 | ILE | C | 200 | 9.368   | 54.855 | 30.895 | 1.00 | 21.61 | C |
| ATOM | 8140 | CG2 | ILE | C | 200 | 11.650  | 54.056 | 31.437 | 1.00 | 20.24 | C |
| ATOM | 8141 | CD1 | ILE | C | 200 | 8.029   | 54.502 | 30.333 | 1.00 | 23.90 | C |
| ATOM | 8142 | N   | PRO | C | 201 | 9.805   | 52.371 | 27.842 | 1.00 | 18.47 | N |
| ATOM | 8143 | CA  | PRO | C | 201 | 8.832   | 51.850 | 26.875 | 1.00 | 17.84 | C |
| ATOM | 8144 | C   | PRO | C | 201 | 7.405   | 52.328 | 27.126 | 1.00 | 19.86 | C |
| ATOM | 8145 | O   | PRO | C | 201 | 6.997   | 52.524 | 28.277 | 1.00 | 18.18 | O |
| ATOM | 8146 | CB  | PRO | C | 201 | 8.975   | 50.341 | 27.028 | 1.00 | 14.87 | C |
| ATOM | 8147 | CG  | PRO | C | 201 | 10.430  | 50.192 | 27.345 | 1.00 | 16.05 | C |
| ATOM | 8148 | CD  | PRO | C | 201 | 10.644  | 51.283 | 28.374 | 1.00 | 17.30 | C |
| ATOM | 8149 | N   | THR | C | 202 | 6.655   | 52.517 | 26.039 | 1.00 | 17.90 | N |
| ATOM | 8150 | CA  | THR | C | 202 | 5.280   | 52.974 | 26.132 | 1.00 | 18.57 | C |
| ATOM | 8151 | C   | THR | C | 202 | 4.477   | 52.123 | 27.098 | 1.00 | 18.59 | C |
| ATOM | 8152 | O   | THR | C | 202 | 3.747   | 52.645 | 27.933 | 1.00 | 20.36 | O |
| ATOM | 8153 | CB  | THR | C | 202 | 4.592   | 52.957 | 24.752 | 1.00 | 16.55 | C |
| ATOM | 8154 | OG1 | THR | C | 202 | 5.101   | 54.036 | 23.962 | 1.00 | 18.96 | O |
| ATOM | 8155 | CG2 | THR | C | 202 | 3.082   | 53.110 | 24.892 | 1.00 | 13.03 | C |
| ATOM | 8156 | N   | GLN | C | 203 | 4.622   | 50.811 | 26.985 | 1.00 | 20.56 | N |
| ATOM | 8157 | CA  | GLN | C | 203 | 3.897   | 49.885 | 27.849 | 1.00 | 21.75 | C |
| ATOM | 8158 | C   | GLN | C | 203 | 4.302   | 50.036 | 29.319 | 1.00 | 21.69 | C |
| ATOM | 8159 | O   | GLN | C | 203 | 3.479   | 49.867 | 30.218 | 1.00 | 21.92 | O |
| ATOM | 8160 | CB  | GLN | C | 203 | 4.124   | 48.444 | 27.370 | 1.00 | 22.27 | C |
| ATOM | 8161 | CG  | GLN | C | 203 | 3.266   | 47.373 | 28.054 | 1.00 | 25.08 | C |
| ATOM | 8162 | CD  | GLN | C | 203 | 1.760   | 47.660 | 28.007 | 1.00 | 24.60 | C |
| ATOM | 8163 | OE1 | GLN | C | 203 | 1.223   | 48.089 | 26.988 | 1.00 | 25.54 | O |
| ATOM | 8164 | NE2 | GLN | C | 203 | 1.078   | 47.400 | 29.114 | 1.00 | 24.35 | N |
| ATOM | 8165 | N   | GLN | C | 204 | 5.565   | 50.357 | 29.575 | 1.00 | 21.51 | N |
| ATOM | 8166 | CA  | GLN | C | 204 | 5.996   | 50.521 | 30.956 | 1.00 | 19.14 | C |
| ATOM | 8167 | C   | GLN | C | 204 | 5.265   | 51.721 | 31.558 | 1.00 | 19.08 | C |
| ATOM | 8168 | O   | GLN | C | 204 | 4.830   | 51.682 | 32.711 | 1.00 | 18.82 | O |
| ATOM | 8169 | CB  | GLN | C | 204 | 7.510   | 50.733 | 31.043 | 1.00 | 19.23 | C |
| ATOM | 8170 | CG  | GLN | C | 204 | 8.043   | 50.695 | 32.472 | 1.00 | 20.99 | C |
| ATOM | 8171 | CD  | GLN | C | 204 | 9.556   | 50.824 | 32.554 | 1.00 | 22.35 | C |
| ATOM | 8172 | OE1 | GLN | C | 204 | 10.278  | 50.366 | 31.669 | 1.00 | 23.34 | O |
| ATOM | 8173 | NE2 | GLN | C | 204 | 10.041  | 51.438 | 33.631 | 1.00 | 22.26 | N |
| ATOM | 8174 | N   | HIS | C | 205 | 5.102   | 52.788 | 30.785 | 1.00 | 17.05 | N |
| ATOM | 8175 | CA  | HIS | C | 205 | 4.408   | 53.933 | 31.350 | 1.00 | 18.15 | C |
| ATOM | 8176 | C   | HIS | C | 205 | 2.929   | 53.636 | 31.543 | 1.00 | 18.30 | C |
| ATOM | 8177 | O   | HIS | C | 205 | 2.272   | 54.241 | 32.391 | 1.00 | 16.69 | O |
| ATOM | 8178 | CB  | HIS | C | 205 | 4.558   | 55.184 | 30.498 | 1.00 | 17.28 | C |
| ATOM | 8179 | CG  | HIS | C | 205 | 4.250   | 56.432 | 31.258 | 1.00 | 19.21 | C |
| ATOM | 8180 | ND1 | HIS | C | 205 | 3.418   | 57.419 | 30.776 | 1.00 | 19.40 | N |
| ATOM | 8181 | CD2 | HIS | C | 205 | 4.638   | 56.835 | 32.491 | 1.00 | 16.66 | C |
| ATOM | 8182 | CE1 | HIS | C | 205 | 3.307   | 58.377 | 31.680 | 1.00 | 19.16 | C |
| ATOM | 8183 | NE2 | HIS | C | 205 | 4.038   | 58.046 | 32.730 | 1.00 | 20.72 | N |
| ATOM | 8184 | N   | ILE | C | 206 | 2.397   | 52.710 | 30.753 | 1.00 | 17.94 | N |
| ATOM | 8185 | CA  | ILE | C | 206 | 1.006   | 52.336 | 30.918 | 1.00 | 17.26 | C |
| ATOM | 8186 | C   | ILE | C | 206 | 0.926   | 51.557 | 32.234 | 1.00 | 18.04 | C |
| ATOM | 8187 | O   | ILE | C | 206 | -0.082  | 51.620 | 32.940 | 1.00 | 19.05 | O |
| ATOM | 8188 | CB  | ILE | C | 206 | 0.501   | 51.475 | 29.735 | 1.00 | 18.42 | C |
| ATOM | 8189 | CG1 | ILE | C | 206 | 0.245   | 52.379 | 28.521 | 1.00 | 18.65 | C |
| ATOM | 8190 | CG2 | ILE | C | 206 | -0.773  | 50.738 | 30.130 | 1.00 | 17.27 | C |
| ATOM | 8191 | CD1 | ILE | C | 206 | -0.116  | 51.635 | 27.248 | 1.00 | 19.83 | C |
| ATOM | 8192 | N   | ARG | C | 207 | 1.987   | 50.829 | 32.574 | 1.00 | 17.61 | N |
| ATOM | 8193 | CA  | ARG | C | 207 | 1.987   | 50.098 | 33.842 | 1.00 | 18.73 | C |
| ATOM | 8194 | C   | ARG | C | 207 | 1.994   | 51.130 | 34.965 | 1.00 | 17.01 | C |
| ATOM | 8195 | O   | ARG | C | 207 | 1.285   | 50.984 | 35.957 | 1.00 | 15.47 | O |
| ATOM | 8196 | CB  | ARG | C | 207 | 3.208   | 49.174 | 33.971 | 1.00 | 21.10 | C |
| ATOM | 8197 | CG  | ARG | C | 207 | 3.075   | 47.860 | 33.198 | 1.00 | 26.24 | C |
| ATOM | 8198 | CD  | ARG | C | 207 | 4.095   | 46.819 | 33.663 | 1.00 | 32.61 | C |
| ATOM | 8199 | NE  | ARG | C | 207 | 5.462   | 47.128 | 33.242 | 1.00 | 35.22 | N |

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ATOM   8200  CZ  ARG C 207      5.939  46.922  32.016  1.00 35.49           C
ATOM   8201  NH1 ARG C 207      5.159  46.398  31.077  1.00 33.85           N
ATOM   8202  NH2 ARG C 207      7.197  47.244  31.728  1.00 34.46           N
ATOM   8203  N   THR C 208      2.782  52.187  34.793  1.00 15.67           N
ATOM   8204  CA  THR C 208      2.848  53.245  35.796  1.00 15.26           C
ATOM   8205  C   THR C 208      1.458  53.857  36.001  1.00 13.50           C
ATOM   8206  O   THR C 208      0.993  53.999  37.128  1.00 12.22           O
ATOM   8207  CB  THR C 208      3.845  54.356  35.377  1.00 13.54           C
ATOM   8208  OG1 THR C 208      5.189  53.880  35.535  1.00 19.27           O
ATOM   8209  CG2 THR C 208      3.655  55.600  36.218  1.00 12.78           C
ATOM   8210  N   LEU C 209      0.798  54.205  34.902  1.00 13.23           N
ATOM   8211  CA  LEU C 209     -0.530  54.800  34.964  1.00 14.28           C
ATOM   8212  C   LEU C 209     -1.522  53.841  35.609  1.00 14.80           C
ATOM   8213  O   LEU C 209     -2.398  54.259  36.371  1.00 16.05           O
ATOM   8214  CB  LEU C 209     -0.999  55.197  33.556  1.00 12.78           C
ATOM   8215  CG  LEU C 209     -0.198  56.340  32.922  1.00 13.12           C
ATOM   8216  CD1 LEU C 209     -0.585  56.538  31.462  1.00 11.36           C
ATOM   8217  CD2 LEU C 209     -0.434  57.616  33.721  1.00 10.73           C
ATOM   8218  N   THR C 210     -1.367  52.554  35.313  1.00 15.96           N
ATOM   8219  CA  THR C 210     -2.236  51.520  35.862  1.00 15.16           C
ATOM   8220  C   THR C 210     -2.014  51.393  37.366  1.00 16.66           C
ATOM   8221  O   THR C 210     -2.969  51.255  38.140  1.00 18.09           O
ATOM   8222  CB  THR C 210     -1.961  50.161  35.191  1.00 16.16           C
ATOM   8223  OG1 THR C 210     -2.320  50.238  33.812  1.00 14.13           O
ATOM   8224  CG2 THR C 210     -2.771  49.053  35.851  1.00 18.06           C
ATOM   8225  N   SER C 211     -0.751  51.436  37.780  1.00 15.96           N
ATOM   8226  CA  SER C 211     -0.421  51.344  39.201  1.00 15.81           C
ATOM   8227  C   SER C 211     -0.970  52.563  39.953  1.00 15.20           C
ATOM   8228  O   SER C 211     -1.503  52.444  41.062  1.00 15.29           O
ATOM   8229  CB  SER C 211      1.095  51.257  39.380  1.00 16.11           C
ATOM   8230  OG  SER C 211      1.441  51.280  40.752  1.00 20.57           O
ATOM   8231  N   ALA C 212     -0.846  53.737  39.342  1.00 15.62           N
ATOM   8232  CA  ALA C 212     -1.336  54.967  39.956  1.00 16.34           C
ATOM   8233  C   ALA C 212     -2.840  54.870  40.159  1.00 16.35           C
ATOM   8234  O   ALA C 212     -3.362  55.332  41.170  1.00 17.62           O
ATOM   8235  CB  ALA C 212     -0.996  56.172  39.082  1.00 12.70           C
ATOM   8236  N   ARG C 213     -3.534  54.260  39.199  1.00 17.90           N
ATOM   8237  CA  ARG C 213     -4.988  54.106  39.296  1.00 18.19           C
ATOM   8238  C   ARG C 213     -5.333  53.070  40.351  1.00 18.52           C
ATOM   8239  O   ARG C 213     -6.241  53.276  41.160  1.00 19.87           O
ATOM   8240  CB  ARG C 213     -5.592  53.668  37.956  1.00 19.29           C
ATOM   8241  CG  ARG C 213     -7.115  53.551  37.991  1.00 20.03           C
ATOM   8242  CD  ARG C 213     -7.761  54.928  38.005  1.00 21.46           C
ATOM   8243  NE  ARG C 213     -7.627  55.554  36.694  1.00 24.81           N
ATOM   8244  CZ  ARG C 213     -7.851  56.836  36.431  1.00 25.51           C
ATOM   8245  NH1 ARG C 213     -8.225  57.676  37.398  1.00 20.13           N
ATOM   8246  NH2 ARG C 213     -7.713  57.270  35.181  1.00 24.86           N
ATOM   8247  N   LEU C 214     -4.610  51.951  40.342  1.00 16.94           N
ATOM   8248  CA  LEU C 214     -4.852  50.894  41.316  1.00 16.35           C
ATOM   8249  C   LEU C 214     -4.738  51.438  42.739  1.00 17.32           C
ATOM   8250  O   LEU C 214     -5.586  51.161  43.592  1.00 19.31           O
ATOM   8251  CB  LEU C 214     -3.851  49.750  41.124  1.00 15.67           C
ATOM   8252  CG  LEU C 214     -4.046  48.540  42.046  1.00 14.86           C
ATOM   8253  CD1 LEU C 214     -5.416  47.939  41.794  1.00 12.11           C
ATOM   8254  CD2 LEU C 214     -2.948  47.502  41.805  1.00 12.35           C
ATOM   8255  N   ALA C 215     -3.694  52.222  42.992  1.00 16.14           N
ATOM   8256  CA  ALA C 215     -3.490  52.781  44.321  1.00 15.98           C
ATOM   8257  C   ALA C 215     -4.684  53.628  44.739  1.00 16.07           C
ATOM   8258  O   ALA C 215     -5.119  53.556  45.887  1.00 15.93           O
ATOM   8259  CB  ALA C 215     -2.199  53.616  44.368  1.00 12.95           C
ATOM   8260  N   ALA C 216     -5.208  54.429  43.813  1.00 15.65           N
ATOM   8261  CA  ALA C 216     -6.367  55.273  44.111  1.00 16.45           C
ATOM   8262  C   ALA C 216     -7.600  54.420  44.385  1.00 16.38           C
ATOM   8263  O   ALA C 216     -8.369  54.715  45.304  1.00 16.74           O
ATOM   8264  CB  ALA C 216     -6.650  56.246  42.953  1.00 13.86           C
ATOM   8265  N   ASP C 217     -7.792  53.364  43.598  1.00 16.43           N
ATOM   8266  CA  ASP C 217     -8.950  52.492  43.805  1.00 18.16           C
ATOM   8267  C   ASP C 217     -8.878  51.779  45.149  1.00 19.85           C
ATOM   8268  O   ASP C 217     -9.878  51.698  45.870  1.00 19.05           O
ATOM   8269  CB  ASP C 217     -9.067  51.452  42.689  1.00 18.77           C
ATOM   8270  CG  ASP C 217     -9.464  52.067  41.367  1.00 20.46           C
ATOM   8271  OD1 ASP C 217    -10.059  53.166  41.386  1.00 20.02           O
ATOM   8272  OD2 ASP C 217     -9.195  51.449  40.316  1.00 21.92           O
ATOM   8273  N   VAL C 218     -7.700  51.254  45.481  1.00 19.01           N
ATOM   8274  CA  VAL C 218     -7.523  50.558  46.754  1.00 16.67           C
ATOM   8275  C   VAL C 218     -7.747  51.545  47.887  1.00 16.80           C
ATOM   8276  O   VAL C 218     -8.253  51.182  48.951  1.00 15.80           O
ATOM   8277  CB  VAL C 218     -6.105  49.946  46.873  1.00 16.20           C
ATOM   8278  CG1 VAL C 218     -5.835  49.492  48.312  1.00 13.77           C
ATOM   8279  CG2 VAL C 218     -5.976  48.773  45.907  1.00 12.30           C
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ATOM   8280  N    ALA C 219     -7.363  52.796  47.643  1.00 16.65       N
ATOM   8281  CA   ALA C 219     -7.519  53.872  48.616  1.00 18.28       C
ATOM   8282  C    ALA C 219     -8.954  54.397  48.573  1.00 18.90       C
ATOM   8283  O    ALA C 219     -9.343  55.228  49.389  1.00 20.10       O
ATOM   8284  CB   ALA C 219     -6.533  55.001  48.315  1.00 15.67       C
ATOM   8285  N    ASP C 220     -9.722  53.914  47.598  1.00 19.59       N
ATOM   8286  CA   ASP C 220    -11.128  54.276  47.427  1.00 19.68       C
ATOM   8287  C    ASP C 220    -11.443  55.755  47.172  1.00 19.18       C
ATOM   8288  O    ASP C 220    -12.418  56.290  47.704  1.00 21.40       O
ATOM   8289  CB   ASP C 220    -11.929  53.771  48.634  1.00 20.04       C
ATOM   8290  CG   ASP C 220    -13.432  53.918  48.446  1.00 23.28       C
ATOM   8291  OD1  ASP C 220    -13.939  53.611  47.345  1.00 25.04       O
ATOM   8292  OD2  ASP C 220    -14.110  54.331  49.410  1.00 26.91       O
ATOM   8293  N    VAL C 221    -10.624  56.413  46.358  1.00 18.04       N
ATOM   8294  CA   VAL C 221    -10.840  57.816  46.019  1.00 17.01       C
ATOM   8295  C    VAL C 221    -10.596  58.029  44.523  1.00 18.49       C
ATOM   8296  O    VAL C 221     -9.668  57.458  43.956  1.00 18.77       O
ATOM   8297  CB   VAL C 221     -9.919  58.744  46.837  1.00 17.86       C
ATOM   8298  CG1  VAL C 221    -10.324  58.696  48.304  1.00 16.19       C
ATOM   8299  CG2  VAL C 221     -8.454  58.325  46.667  1.00 17.87       C
ATOM   8300  N    PRO C 222    -11.431  58.859  43.869  1.00 18.91       N
ATOM   8301  CA   PRO C 222    -11.356  59.176  42.438  1.00 18.86       C
ATOM   8302  C    PRO C 222    -10.222  60.114  42.032  1.00 18.18       C
ATOM   8303  O    PRO C 222    -10.440  61.078  41.298  1.00 16.62       O
ATOM   8304  CB   PRO C 222    -12.729  59.786  42.160  1.00 19.22       C
ATOM   8305  CG   PRO C 222    -12.975  60.556  43.394  1.00 17.28       C
ATOM   8306  CD   PRO C 222    -12.551  59.587  44.494  1.00 18.56       C
ATOM   8307  N    THR C 223     -9.011  59.826  42.492  1.00 18.03       N
ATOM   8308  CA   THR C 223     -7.865  60.672  42.168  1.00 18.19       C
ATOM   8309  C    THR C 223     -7.704  60.940  40.664  1.00 18.09       C
ATOM   8310  O    THR C 223     -7.808  60.029  39.841  1.00 17.19       O
ATOM   8311  CB   THR C 223     -6.542  60.049  42.682  1.00 17.77       C
ATOM   8312  OG1  THR C 223     -6.652  59.750  44.082  1.00 16.67       O
ATOM   8313  CG2  THR C 223     -5.388  61.018  42.470  1.00 16.56       C
ATOM   8314  N    VAL C 224     -7.445  62.195  40.311  1.00 16.99       N
ATOM   8315  CA   VAL C 224     -7.234  62.556  38.914  1.00 16.85       C
ATOM   8316  C    VAL C 224     -5.829  62.123  38.492  1.00 17.87       C
ATOM   8317  O    VAL C 224     -4.825  62.610  39.023  1.00 17.53       O
ATOM   8318  CB   VAL C 224     -7.368  64.071  38.702  1.00 17.23       C
ATOM   8319  CG1  VAL C 224     -6.944  64.436  37.288  1.00 15.59       C
ATOM   8320  CG2  VAL C 224     -8.802  64.509  38.967  1.00 17.78       C
ATOM   8321  N    VAL C 225     -5.764  61.203  37.539  1.00 17.73       N
ATOM   8322  CA   VAL C 225     -4.490  60.693  37.045  1.00 17.72       C
ATOM   8323  C    VAL C 225     -4.064  61.404  35.766  1.00 18.72       C
ATOM   8324  O    VAL C 225     -4.791  61.408  34.772  1.00 19.48       O
ATOM   8325  CB   VAL C 225     -4.583  59.182  36.786  1.00 17.41       C
ATOM   8326  CG1  VAL C 225     -3.287  58.670  36.202  1.00 15.04       C
ATOM   8327  CG2  VAL C 225     -4.919  58.463  38.089  1.00 16.01       C
ATOM   8328  N    ILE C 226     -2.880  62.009  35.799  1.00 19.45       N
ATOM   8329  CA   ILE C 226     -2.358  62.742  34.652  1.00 18.10       C
ATOM   8330  C    ILE C 226     -1.144  62.065  34.025  1.00 17.99       C
ATOM   8331  O    ILE C 226     -0.189  61.702  34.715  1.00 17.46       O
ATOM   8332  CB   ILE C 226     -1.963  64.168  35.055  1.00 17.72       C
ATOM   8333  CG1  ILE C 226     -3.175  64.885  35.644  1.00 19.94       C
ATOM   8334  CG2  ILE C 226     -1.431  64.927  33.851  1.00 18.42       C
ATOM   8335  CD1  ILE C 226     -2.865  66.263  36.183  1.00 21.31       C
ATOM   8336  N    ALA C 227     -1.178  61.908  32.708  1.00 17.33       N
ATOM   8337  CA   ALA C 227     -0.073  61.291  32.003  1.00 18.92       C
ATOM   8338  C    ALA C 227      0.745  62.343  31.265  1.00 20.17       C
ATOM   8339  O    ALA C 227      0.204  63.150  30.508  1.00 20.54       O
ATOM   8340  CB   ALA C 227     -0.594  60.244  31.021  1.00 19.21       C
ATOM   8341  N    ARG C 228      2.052  62.325  31.494  1.00 21.06       N
ATOM   8342  CA   ARG C 228      2.969  63.259  30.849  1.00 20.54       C
ATOM   8343  C    ARG C 228      3.985  62.517  29.989  1.00 20.39       C
ATOM   8344  O    ARG C 228      4.489  61.463  30.378  1.00 20.15       O
ATOM   8345  CB   ARG C 228      3.709  64.087  31.906  1.00 19.70       C
ATOM   8346  CG   ARG C 228      5.041  64.651  31.426  1.00 19.88       C
ATOM   8347  CD   ARG C 228      5.703  65.550  32.475  1.00 19.78       C
ATOM   8348  NE   ARG C 228      7.144  65.655  32.262  1.00 20.10       N
ATOM   8349  CZ   ARG C 228      7.930  66.544  32.861  1.00 22.84       C
ATOM   8350  NH1  ARG C 228      7.415  67.419  33.714  1.00 22.36       N
ATOM   8351  NH2  ARG C 228      9.234  66.548  32.615  1.00 21.65       N
ATOM   8352  N    THR C 229      4.271  63.055  28.808  1.00 21.14       N
ATOM   8353  CA   THR C 229      5.264  62.443  27.933  1.00 20.71       C
ATOM   8354  C    THR C 229      6.365  63.452  27.662  1.00 21.46       C
ATOM   8355  O    THR C 229      6.094  64.633  27.428  1.00 22.19       O
ATOM   8356  CB   THR C 229      4.667  61.985  26.582  1.00 20.56       C
ATOM   8357  OG1  THR C 229      5.692  61.346  25.818  1.00 17.32       O
ATOM   8358  CG2  THR C 229      4.121  63.172  25.784  1.00 20.39       C
ATOM   8359  N    ASP C 230      7.607  62.983  27.709  1.00 22.00       N
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ATOM   8360  CA  ASP C 230      8.774  63.828  27.477  1.00 22.09           C
ATOM   8361  C   ASP C 230      9.414  63.517  26.126  1.00 22.14           C
ATOM   8362  O   ASP C 230     10.557  63.884  25.875  1.00 20.09           O
ATOM   8363  CB  ASP C 230      9.798  63.610  28.598  1.00 23.42           C
ATOM   8364  CG  ASP C 230      9.449  64.367  29.863  1.00 23.30           C
ATOM   8365  OD1 ASP C 230      9.689  65.588  29.899  1.00 27.06           O
ATOM   8366  OD2 ASP C 230      8.925  63.755  30.815  1.00 22.49           O
ATOM   8367  N   ALA C 231      8.658  62.844  25.261  1.00 23.36           N
ATOM   8368  CA  ALA C 231      9.134  62.444  23.939  1.00 23.13           C
ATOM   8369  C   ALA C 231      9.398  63.591  22.972  1.00 23.97           C
ATOM   8370  O   ALA C 231      9.890  63.366  21.873  1.00 22.84           O
ATOM   8371  CB  ALA C 231      8.143  61.468  23.309  1.00 23.93           C
ATOM   8372  N   GLU C 232      9.071  64.815  23.368  1.00 26.05           N
ATOM   8373  CA  GLU C 232      9.288  65.958  22.491  1.00 26.93           C
ATOM   8374  C   GLU C 232     10.779  66.246  22.333  1.00 26.78           C
ATOM   8375  O   GLU C 232     11.258  66.490  21.225  1.00 26.96           O
ATOM   8376  CB  GLU C 232      8.558  67.181  23.047  1.00 29.47           C
ATOM   8377  CG  GLU C 232      8.248  68.268  22.026  1.00 34.10           C
ATOM   8378  CD  GLU C 232      9.367  69.275  21.876  1.00 36.62           C
ATOM   8379  OE1 GLU C 232      9.677  69.979  22.861  1.00 37.83           O
ATOM   8380  OE2 GLU C 232      9.938  69.362  20.770  1.00 40.47           O
ATOM   8381  N   ALA C 233     11.520  66.190  23.435  1.00 24.92           N
ATOM   8382  CA  ALA C 233     12.953  66.468  23.388  1.00 25.52           C
ATOM   8383  C   ALA C 233     13.860  65.266  23.637  1.00 24.99           C
ATOM   8384  O   ALA C 233     15.012  65.262  23.212  1.00 26.52           O
ATOM   8385  CB  ALA C 233     13.296  67.588  24.376  1.00 23.11           C
ATOM   8386  N   ALA C 234     13.353  64.246  24.321  1.00 25.18           N
ATOM   8387  CA  ALA C 234     14.168  63.067  24.610  1.00 23.95           C
ATOM   8388  C   ALA C 234     14.637  62.349  23.343  1.00 23.99           C
ATOM   8389  O   ALA C 234     13.844  62.074  22.443  1.00 24.74           O
ATOM   8390  CB  ALA C 234     13.391  62.115  25.485  1.00 22.85           C
ATOM   8391  N   THR C 235     15.930  62.043  23.278  1.00 23.70           N
ATOM   8392  CA  THR C 235     16.493  61.347  22.124  1.00 23.56           C
ATOM   8393  C   THR C 235     17.011  59.969  22.537  1.00 24.13           C
ATOM   8394  O   THR C 235     17.724  59.307  21.787  1.00 23.60           O
ATOM   8395  CB  THR C 235     17.662  62.133  21.490  1.00 24.41           C
ATOM   8396  OG1 THR C 235     18.729  62.247  22.435  1.00 25.84           O
ATOM   8397  CG2 THR C 235     17.214  63.520  21.070  1.00 24.70           C
ATOM   8398  N   LEU C 236     16.651  59.540  23.740  1.00 23.60           N
ATOM   8399  CA  LEU C 236     17.081  58.239  24.228  1.00 23.40           C
ATOM   8400  C   LEU C 236     15.906  57.468  24.810  1.00 23.16           C
ATOM   8401  O   LEU C 236     14.940  58.064  25.278  1.00 21.62           O
ATOM   8402  CB  LEU C 236     18.158  58.402  25.305  1.00 23.79           C
ATOM   8403  CG  LEU C 236     19.503  58.992  24.868  1.00 25.28           C
ATOM   8404  CD1 LEU C 236     20.393  59.225  26.081  1.00 25.92           C
ATOM   8405  CD2 LEU C 236     20.174  58.049  23.894  1.00 25.67           C
ATOM  .8406  N   ILE C 237     15.994  56.140  24.752  1.00 23.02           N
ATOM   8407  CA  ILE C 237     14.976  55.258  25.313  1.00 22.36           C
ATOM   8408  C   ILE C 237     15.692  54.008  25.835  1.00 22.79           C
ATOM   8409  O   ILE C 237     16.659  53.531  25.230  1.00 22.50           O
ATOM   8410  CB  ILE C 237     13.879  54.871  24.269  1.00 22.40           C
ATOM   8411  CG1 ILE C 237     12.722  54.161  24.985  1.00 20.72           C
ATOM   8412  CG2 ILE C 237     14.461  53.988  23.178  1.00 22.25           C
ATOM   8413  CD1 ILE C 237     11.519  53.874  24.110  1.00 21.68           C
ATOM   8414  N   THR C 238     15.220  53.493  26.968  1.00 20.96           N
ATOM   8415  CA  THR C 238     15.820  52.334  27.607  1.00 21.33           C
ATOM   8416  C   THR C 238     15.763  51.047  26.805  1.00 22.36           C
ATOM   8417  O   THR C 238     16.672  50.227  26.900  1.00 23.14           O
ATOM   8418  CB  THR C 238     15.171  52.045  28.994  1.00 22.48           C
ATOM   8419  OG1 THR C 238     13.777  51.739  28.827  1.00 19.04           O
ATOM   8420  CG2 THR C 238     15.321  53.245  29.912  1.00 21.18           C
ATOM   8421  N   SER C 239     14.707  50.865  26.017  1.00 22.16           N
ATOM   8422  CA  SER C 239     14.557  49.636  25.248  1.00 22.70           C
ATOM   8423  C   SER C 239     13.711  49.791  23.982  1.00 24.27           C
ATOM   8424  O   SER C 239     12.910  50.715  23.869  1.00 23.14           O
ATOM   8425  CB  SER C 239     13.931  48.566  26.147  1.00 21.12           C
ATOM   8426  OG  SER C 239     13.691  47.368  25.435  1.00 23.51           O
ATOM   8427  N   ASP C 240     13.891  48.865  23.042  1.00 25.38           N
ATOM   8428  CA  ASP C 240     13.145  48.873  21.785  1.00 26.51           C
ATOM   8429  C   ASP C 240     12.125  47.733  21.776  1.00 27.21           C
ATOM   8430  O   ASP C 240     11.614  47.343  20.727  1.00 28.96           O
ATOM   8431  CB  ASP C 240     14.112  48.721  20.605  1.00 26.53           C
ATOM   8432  CG  ASP C 240     14.806  47.372  20.591  1.00 28.77           C
ATOM   8433  OD1 ASP C 240     14.963  46.766  21.673  1.00 29.87           O
ATOM   8434  OD2 ASP C 240     15.211  46.919  19.498  1.00 31.37           O
ATOM   8435  N   VAL C 241     11.830  47.208  22.961  1.00 27.03           N
ATOM   8436  CA  VAL C 241     10.884  46.112  23.123  1.00 25.27           C
ATOM   8437  C   VAL C 241      9.473  46.394  22.598  1.00 25.03           C
ATOM   8438  O   VAL C 241      8.842  45.530  21.982  1.00 22.96           O
ATOM   8439  CB  VAL C 241     10.766  45.711  24.620  1.00 26.01           C
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| ATOM | 8440 | CG1 | VAL | C | 241 | 10.263 | 46.893 | 25.444 | 1.00 | 24.56 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 8441 | CG2 | VAL | C | 241 | 9.822 | 44.529 | 24.774 | 1.00 | 25.33 | C |
| ATOM | 8442 | N | ASP | C | 242 | 8.981 | 47.601 | 22.839 | 1.00 | 23.36 | N |
| ATOM | 8443 | CA | ASP | C | 242 | 7.633 | 47.956 | 22.435 | 1.00 | 23.19 | C |
| ATOM | 8444 | C | ASP | C | 242 | 7.494 | 48.332 | 20.958 | 1.00 | 25.08 | C |
| ATOM | 8445 | O | ASP | C | 242 | 8.168 | 49.234 | 20.457 | 1.00 | 24.54 | O |
| ATOM | 8446 | CB | ASP | C | 242 | 7.125 | 49.092 | 23.321 | 1.00 | 23.60 | C |
| ATOM | 8447 | CG | ASP | C | 242 | 5.620 | 49.183 | 23.333 | 1.00 | 22.41 | C |
| ATOM | 8448 | OD1 | ASP | C | 242 | 5.030 | 49.202 | 22.238 | 1.00 | 24.00 | O |
| ATOM | 8449 | OD2 | ASP | C | 242 | 5.028 | 49.236 | 24.431 | 1.00 | 21.88 | O |
| ATOM | 8450 | N | GLU | C | 243 | 6.596 | 47.637 | 20.269 | 1.00 | 26.22 | N |
| ATOM | 8451 | CA | GLU | C | 243 | 6.361 | 47.870 | 18.850 | 1.00 | 28.46 | C |
| ATOM | 8452 | C | GLU | C | 243 | 5.872 | 49.277 | 18.532 | 1.00 | 27.02 | C |
| ATOM | 8453 | O | GLU | C | 243 | 6.027 | 49.751 | 17.412 | 1.00 | 25.72 | O |
| ATOM | 8454 | CB | GLU | C | 243 | 5.375 | 46.829 | 18.312 | 1.00 | 31.70 | C |
| ATOM | 8455 | CG | GLU | C | 243 | 5.979 | 45.434 | 18.251 | 1.00 | 40.65 | C |
| ATOM | 8456 | CD | GLU | C | 243 | 5.023 | 44.382 | 17.718 | 1.00 | 45.66 | C |
| ATOM | 8457 | OE1 | GLU | C | 243 | 4.470 | 44.573 | 16.611 | 1.00 | 47.95 | O |
| ATOM | 8458 | OE2 | GLU | C | 243 | 4.834 | 43.353 | 18.406 | 1.00 | 48.83 | O |
| ATOM | 8459 | N | ARG | C | 244 | 5.284 | 49.946 | 19.514 | 1.00 | 25.92 | N |
| ATOM | 8460 | CA | ARG | C | 244 | 4.803 | 51.305 | 19.304 | 1.00 | 25.53 | C |
| ATOM | 8461 | C | ARG | C | 244 | 5.948 | 52.315 | 19.316 | 1.00 | 25.71 | C |
| ATOM | 8462 | O | ARG | C | 244 | 5.803 | 53.429 | 18.814 | 1.00 | 27.08 | O |
| ATOM | 8463 | CB | ARG | C | 244 | 3.786 | 51.669 | 20.381 | 1.00 | 25.88 | C |
| ATOM | 8464 | CG | ARG | C | 244 | 2.449 | 50.987 | 20.194 | 1.00 | 26.46 | C |
| ATOM | 8465 | CD | ARG | C | 244 | 1.607 | 51.099 | 21.445 | 1.00 | 26.96 | C |
| ATOM | 8466 | NE | ARG | C | 244 | 2.222 | 50.375 | 22.552 | 1.00 | 24.73 | N |
| ATOM | 8467 | CZ | ARG | C | 244 | 1.600 | 50.077 | 23.685 | 1.00 | 24.71 | C |
| ATOM | 8468 | NH1 | ARG | C | 244 | 0.337 | 50.446 | 23.870 | 1.00 | 22.51 | N |
| ATOM | 8469 | NH2 | ARG | C | 244 | 2.236 | 49.395 | 24.624 | 1.00 | 23.85 | N |
| ATOM | 8470 | N | ASP | C | 245 | 7.086 | 51.923 | 19.886 | 1.00 | 23.89 | N |
| ATOM | 8471 | CA | ASP | C | 245 | 8.241 | 52.811 | 19.957 | 1.00 | 24.00 | C |
| ATOM | 8472 | C | ASP | C | 245 | 9.242 | 52.579 | 18.832 | 1.00 | 23.62 | C |
| ATOM | 8473 | O | ASP | C | 245 | 9.954 | 53.503 | 18.431 | 1.00 | 22.48 | O |
| ATOM | 8474 | CB | ASP | C | 245 | 8.970 | 52.651 | 21.294 | 1.00 | 21.41 | C |
| ATOM | 8475 | CG | ASP | C | 245 | 8.078 | 52.932 | 22.483 | 1.00 | 21.82 | C |
| ATOM | 8476 | OD1 | ASP | C | 245 | 7.255 | 53.873 | 22.396 | 1.00 | 18.98 | O |
| ATOM | 8477 | OD2 | ASP | C | 245 | 8.214 | 52.220 | 23.505 | 1.00 | 16.60 | O |
| ATOM | 8478 | N | GLN | C | 246 | 9.288 | 51.347 | 18.329 | 1.00 | 23.21 | N |
| ATOM | 8479 | CA | GLN | C | 246 | 10.218 | 50.971 | 17.266 | 1.00 | 25.32 | C |
| ATOM | 8480 | C | GLN | C | 246 | 10.263 | 51.889 | 16.041 | 1.00 | 25.67 | C |
| ATOM | 8481 | O | GLN | C | 246 | 11.329 | 52.098 | 15.458 | 1.00 | 25.01 | O |
| ATOM | 8482 | CB | GLN | C | 246 | 9.944 | 49.527 | 16.837 | 1.00 | 26.29 | C |
| ATOM | 8483 | CG | GLN | C | 246 | 10.022 | 48.559 | 18.016 | 1.00 | 28.17 | C |
| ATOM | 8484 | CD | GLN | C | 246 | 9.734 | 47.117 | 17.648 | 1.00 | 28.26 | C |
| ATOM | 8485 | OE1 | GLN | C | 246 | 9.263 | 46.819 | 16.552 | 1.00 | 27.94 | O |
| ATOM | 8486 | NE2 | GLN | C | 246 | 10.008 | 46.208 | 18.580 | 1.00 | 26.76 | N |
| ATOM | 8487 | N | PRO | C | 247 | 9.118 | 52.457 | 15.633 | 1.00 | 25.94 | N |
| ATOM | 8488 | CA | PRO | C | 247 | 9.183 | 53.334 | 14.457 | 1.00 | 26.72 | C |
| ATOM | 8489 | C | PRO | C | 247 | 10.182 | 54.484 | 14.633 | 1.00 | 26.78 | C |
| ATOM | 8490 | O | PRO | C | 247 | 10.762 | 54.979 | 13.668 | 1.00 | 27.25 | O |
| ATOM | 8491 | CB | PRO | C | 247 | 7.744 | 53.840 | 14.327 | 1.00 | 25.93 | C |
| ATOM | 8492 | CG | PRO | C | 247 | 6.935 | 52.681 | 14.841 | 1.00 | 25.87 | C |
| ATOM | 8493 | CD | PRO | C | 247 | 7.723 | 52.264 | 16.074 | 1.00 | 25.02 | C |
| ATOM | 8494 | N | PHE | C | 248 | 10.400 | 54.886 | 15.877 | 1.00 | 27.14 | N |
| ATOM | 8495 | CA | PHE | C | 248 | 11.289 | 56.000 | 16.162 | 1.00 | 26.71 | C |
| ATOM | 8496 | C | PHE | C | 248 | 12.707 | 55.598 | 16.557 | 1.00 | 27.74 | C |
| ATOM | 8497 | O | PHE | C | 248 | 13.595 | 56.445 | 16.617 | 1.00 | 28.11 | O |
| ATOM | 8498 | CB | PHE | C | 248 | 10.658 | 56.855 | 17.258 | 1.00 | 26.48 | C |
| ATOM | 8499 | CG | PHE | C | 248 | 9.221 | 57.226 | 16.983 | 1.00 | 27.28 | C |
| ATOM | 8500 | CD1 | PHE | C | 248 | 8.906 | 58.243 | 16.085 | 1.00 | 27.74 | C |
| ATOM | 8501 | CD2 | PHE | C | 248 | 8.180 | 56.525 | 17.590 | 1.00 | 25.52 | C |
| ATOM | 8502 | CE1 | PHE | C | 248 | 7.573 | 58.553 | 15.795 | 1.00 | 27.95 | C |
| ATOM | 8503 | CE2 | PHE | C | 248 | 6.849 | 56.825 | 17.307 | 1.00 | 25.32 | C |
| ATOM | 8504 | CZ | PHE | C | 248 | 6.543 | 57.840 | 16.408 | 1.00 | 26.82 | C |
| ATOM | 8505 | N | ILE | C | 249 | 12.925 | 54.315 | 16.827 | 1.00 | 28.59 | N |
| ATOM | 8506 | CA | ILE | C | 249 | 14.250 | 53.844 | 17.222 | 1.00 | 29.96 | C |
| ATOM | 8507 | C | ILE | C | 249 | 15.170 | 53.842 | 16.008 | 1.00 | 31.59 | C |
| ATOM | 8508 | O | ILE | C | 249 | 14.856 | 53.234 | 14.983 | 1.00 | 30.98 | O |
| ATOM | 8509 | CB | ILE | C | 249 | 14.194 | 52.407 | 17.796 | 1.00 | 30.60 | C |
| ATOM | 8510 | CG1 | ILE | C | 249 | 13.128 | 52.310 | 18.890 | 1.00 | 30.49 | C |
| ATOM | 8511 | CG2 | ILE | C | 249 | 15.557 | 52.011 | 18.333 | 1.00 | 30.01 | C |
| ATOM | 8512 | CD1 | ILE | C | 249 | 13.365 | 53.195 | 20.072 | 1.00 | 31.75 | C |
| ATOM | 8513 | N | THR | C | 250 | 16.315 | 54.506 | 16.133 | 1.00 | 33.32 | N |
| ATOM | 8514 | CA | THR | C | 250 | 17.271 | 54.598 | 15.034 | 1.00 | 34.34 | C |
| ATOM | 8515 | C | THR | C | 250 | 18.239 | 53.438 | 14.980 | 1.00 | 35.62 | C |
| ATOM | 8516 | O | THR | C | 250 | 19.005 | 53.343 | 14.039 | 1.00 | 36.85 | O |
| ATOM | 8517 | CB | THR | C | 250 | 18.149 | 55.853 | 15.131 | 1.00 | 34.89 | C |
| ATOM | 8518 | OG1 | THR | C | 250 | 19.122 | 55.660 | 16.165 | 1.00 | 34.80 | O |
| ATOM | 8519 | CG2 | THR | C | 250 | 17.310 | 57.083 | 15.445 | 1.00 | 35.92 | C |

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ATOM   8520  N   GLY C 251      18.244  52.582  15.995  1.00 35.51           N
ATOM   8521  CA  GLY C 251      19.170  51.462  15.987  1.00 34.70           C
ATOM   8522  C   GLY C 251      20.500  51.734  16.678  1.00 34.48           C
ATOM   8523  O   GLY C 251      21.182  50.793  17.087  1.00 33.29           O
ATOM   8524  N   GLU C 252      20.880  53.005  16.805  1.00 34.40           N
ATOM   8525  CA  GLU C 252      22.135  53.366  17.470  1.00 35.69           C
ATOM   8526  C   GLU C 252      21.992  53.190  18.971  1.00 34.56           C
ATOM   8527  O   GLU C 252      20.935  53.462  19.544  1.00 31.41           O
ATOM   8528  CB  GLU C 252      22.507  54.827  17.221  1.00 37.85           C
ATOM   8529  CG  GLU C 252      22.477  55.272  15.789  1.00 43.25           C
ATOM   8530  CD  GLU C 252      22.570  56.777  15.685  1.00 45.56           C
ATOM   8531  OE1 GLU C 252      23.629  57.324  16.075  1.00 43.83           O
ATOM   8532  OE2 GLU C 252      21.578  57.401  15.234  1.00 45.49           O
ATOM   8533  N   ARG C 253      23.078  52.770  19.603  1.00 35.10           N
ATOM   8534  CA  ARG C 253      23.106  52.557  21.044  1.00 36.34           C
ATOM   8535  C   ARG C 253      24.222  53.382  21.661  1.00 35.82           C
ATOM   8536  O   ARG C 253      25.244  53.627  21.020  1.00 34.99           O
ATOM   8537  CB  ARG C 253      23.355  51.081  21.344  1.00 38.00           C
ATOM   8538  CG  ARG C 253      22.289  50.160  20.804  1.00 41.15           C
ATOM   8539  CD  ARG C 253      21.207  49.925  21.834  1.00 43.12           C
ATOM   8540  NE  ARG C 253      21.579  48.899  22.806  1.00 43.41           N
ATOM   8541  CZ  ARG C 253      21.822  47.629  22.496  1.00 44.69           C
ATOM   8542  NH1 ARG C 253      21.740  47.225  21.237  1.00 47.29           N
ATOM   8543  NH2 ARG C 253      22.127  46.754  23.444  1.00 44.48           N
ATOM   8544  N   THR C 254      24.023  53.816  22.902  1.00 35.96           N
ATOM   8545  CA  THR C 254      25.045  54.588  23.597  1.00 35.25           C
ATOM   8546  C   THR C 254      25.916  53.596  24.348  1.00 34.67           C
ATOM   8547  O   THR C 254      25.662  52.392  24.310  1.00 34.81           O
ATOM   8548  CB  THR C 254      24.432  55.567  24.606  1.00 33.39           C
ATOM   8549  OG1 THR C 254      23.774  54.835  25.645  1.00 32.27           O
ATOM   8550  CG2 THR C 254      23.432  56.475  23.913  1.00 34.00           C
ATOM   8551  N   ARG C 255      26.945  54.093  25.022  1.00 35.84           N
ATOM   8552  CA  ARG C 255      27.822  53.217  25.783  1.00 35.99           C
ATOM   8553  C   ARG C 255      27.051  52.578  26.935  1.00 33.59           C
ATOM   8554  O   ARG C 255      27.302  51.430  27.280  1.00 32.09           O
ATOM   8555  CB  ARG C 255      29.019  54.000  26.327  1.00 39.84           C
ATOM   8556  CG  ARG C 255      29.902  54.605  25.246  1.00 47.48           C
ATOM   8557  CD  ARG C 255      31.126  55.290  25.846  1.00 52.94           C
ATOM   8558  NE  ARG C 255      31.983  54.344  26.558  1.00 57.29           N
ATOM   8559  CZ  ARG C 255      32.600  53.316  25.981  1.00 59.65           C
ATOM   8560  NH1 ARG C 255      32.458  53.100  24.678  1.00 60.50           N
ATOM   8561  NH2 ARG C 255      33.359  52.502  26.707  1.00 59.91           N
ATOM   8562  N   GLU C 256      26.102  53.318  27.512  1.00 32.44           N
ATOM   8563  CA  GLU C 256      25.307  52.809  28.629  1.00 31.79           C
ATOM   8564  C   GLU C 256      24.295  51.760  28.199  1.00 31.21           C
ATOM   8565  O   GLU C 256      23.728  51.070  29.042  1.00 33.27           O
ATOM   8566  CB  GLU C 256      24.559  53.942  29.344  1.00 32.36           C
ATOM   8567  CG  GLU C 256      25.442  55.074  29.842  1.00 32.86           C
ATOM   8568  CD  GLU C 256      25.539  56.216  28.844  1.00 33.10           C
ATOM   8569  OE1 GLU C 256      25.575  55.939  27.625  1.00 32.10           O
ATOM   8570  OE2 GLU C 256      25.589  57.390  29.279  1.00 34.54           O
ATOM   8571  N   GLY C 257      24.056  51.651  26.896  1.00 29.80           N
ATOM   8572  CA  GLY C 257      23.104  50.674  26.400  1.00 28.29           C
ATOM   8573  C   GLY C 257      21.752  51.247  26.004  1.00 28.36           C
ATOM   8574  O   GLY C 257      20.830  50.497  25.685  1.00 27.81           O
ATOM   8575  N   PHE C 258      21.626  52.572  26.025  1.00 27.13           N
ATOM   8576  CA  PHE C 258      20.376  53.217  25.654  1.00 26.68           C
ATOM   8577  C   PHE C 258      20.263  53.276  24.134  1.00 28.55           C
ATOM   8578  O   PHE C 258      21.277  53.289  23.433  1.00 30.02           O
ATOM   8579  CB  PHE C 258      20.314  54.641  26.205  1.00 25.41           C
ATOM   8580  CG  PHE C 258      20.475  54.738  27.697  1.00 24.65           C
ATOM   8581  CD1 PHE C 258      19.660  54.001  28.555  1.00 26.91           C
ATOM   8582  CD2 PHE C 258      21.406  55.613  28.247  1.00 22.96           C
ATOM   8583  CE1 PHE C 258      19.767  54.140  29.943  1.00 25.63           C
ATOM   8584  CE2 PHE C 258      21.525  55.764  29.628  1.00 25.32           C
ATOM   8585  CZ  PHE C 258      20.702  55.026  30.482  1.00 24.54           C
ATOM   8586  N   TYR C 259      19.030  53.314  23.630  1.00 28.37           N
ATOM   8587  CA  TYR C 259      18.781  53.383  22.192  1.00 27.16           C
ATOM   8588  C   TYR C 259      18.412  54.804  21.762  1.00 28.00           C
ATOM   8589  O   TYR C 259      17.562  55.444  22.393  1.00 27.65           O
ATOM   8590  CB  TYR C 259      17.626  52.463  21.792  1.00 26.76           C
ATOM   8591  CG  TYR C 259      17.845  50.983  22.013  1.00 25.55           C
ATOM   8592  CD1 TYR C 259      17.891  50.443  23.296  1.00 26.12           C
ATOM   8593  CD2 TYR C 259      17.973  50.116  20.931  1.00 25.64           C
ATOM   8594  CE1 TYR C 259      18.058  49.073  23.496  1.00 23.39           C
ATOM   8595  CE2 TYR C 259      18.140  48.747  21.118  1.00 24.74           C
ATOM   8596  CZ  TYR C 259      18.181  48.232  22.401  1.00 24.90           C
ATOM   8597  OH  TYR C 259      18.346  46.877  22.581  1.00 24.58           O
ATOM   8598  N   ARG C 260      19.041  55.292  20.693  1.00 26.78           N
ATOM   8599  CA  ARG C 260      18.724  56.620  20.177  1.00 26.83           C
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| ATOM | 8600 | C | ARG C 260 | 17.327 | 56.524 | 19.585 | 1.00 26.11 | C |
|------|------|-----|-----------|--------|--------|--------|------------|---|
| ATOM | 8601 | O | ARG C 260 | 16.965 | 55.509 | 18.991 | 1.00 23.73 | O |
| ATOM | 8602 | CB | ARG C 260 | 19.707 | 57.045 | 19.076 | 1.00 28.93 | C |
| ATOM | 8603 | CG | ARG C 260 | 21.091 | 57.450 | 19.563 | 1.00 30.71 | C |
| ATOM | 8604 | CD | ARG C 260 | 21.042 | 58.743 | 20.356 | 1.00 33.26 | C |
| ATOM | 8605 | NE | ARG C 260 | 22.326 | 59.040 | 20.989 | 1.00 36.71 | N |
| ATOM | 8606 | CZ | ARG C 260 | 22.509 | 59.995 | 21.896 | 1.00 37.22 | C |
| ATOM | 8607 | NH1 | ARG C 260 | 21.488 | 60.753 | 22.282 | 1.00 39.09 | N |
| ATOM | 8608 | NH2 | ARG C 260 | 23.708 | 60.185 | 22.430 | 1.00 38.18 | N |
| ATOM | 8609 | N | THR C 261 | 16.542 | 57.580 | 19.749 | 1.00 26.73 | N |
| ATOM | 8610 | CA | THR C 261 | 15.185 | 57.597 | 19.230 | 1.00 27.41 | C |
| ATOM | 8611 | C | THR C 261 | 14.840 | 58.999 | 18.741 | 1.00 27.63 | C |
| ATOM | 8612 | O | THR C 261 | 15.240 | 59.992 | 19.348 | 1.00 27.67 | O |
| ATOM | 8613 | CB | THR C 261 | 14.181 | 57.161 | 20.319 | 1.00 26.37 | C |
| ATOM | 8614 | OG1 | THR C 261 | 12.845 | 57.231 | 19.804 | 1.00 28.79 | O |
| ATOM | 8615 | CG2 | THR C 261 | 14.297 | 58.059 | 21.533 | 1.00 26.55 | C |
| ATOM | 8616 | N | LYS C 262 | 14.100 | 59.072 | 17.639 | 1.00 28.70 | N |
| ATOM | 8617 | CA | LYS C 262 | 13.709 | 60.347 | 17.053 | 1.00 30.79 | C |
| ATOM | 8618 | C | LYS C 262 | 12.619 | 61.063 | 17.843 | 1.00 30.23 | C |
| ATOM | 8619 | O | LYS C 262 | 11.492 | 60.588 | 17.946 | 1.00 30.30 | O |
| ATOM | 8620 | CB | LYS C 262 | 13.247 | 60.131 | 15.615 | 1.00 34.13 | C |
| ATOM | 8621 | CG | LYS C 262 | 14.325 | 59.540 | 14.745 | 1.00 39.54 | C |
| ATOM | 8622 | CD | LYS C 262 | 13.888 | 59.415 | 13.307 | 1.00 43.51 | C |
| ATOM | 8623 | CE | LYS C 262 | 15.092 | 59.124 | 12.438 | 1.00 46.41 | C |
| ATOM | 8624 | NZ | LYS C 262 | 16.124 | 60.195 | 12.589 | 1.00 46.82 | N |
| ATOM | 8625 | N | ASN C 263 | 12.972 | 62.221 | 18.388 | 1.00 30.42 | N |
| ATOM | 8626 | CA | ASN C 263 | 12.051 | 63.024 | 19.181 | 1.00 30.04 | C |
| ATOM | 8627 | C | ASN C 263 | 11.159 | 63.894 | 18.302 | 1.00 29.73 | C |
| ATOM | 8628 | O | ASN C 263 | 11.303 | 63.929 | 17.079 | 1.00 28.80 | O |
| ATOM | 8629 | CB | ASN C 263 | 12.843 | 63.918 | 20.123 | 1.00 30.42 | C |
| ATOM | 8630 | CG | ASN C 263 | 13.777 | 64.839 | 19.378 | 1.00 32.68 | C |
| ATOM | 8631 | OD1 | ASN C 263 | 14.665 | 64.384 | 18.658 | 1.00 33.47 | O |
| ATOM | 8632 | ND2 | ASN C 263 | 13.576 | 66.140 | 19.533 | 1.00 32.69 | N |
| ATOM | 8633 | N | GLY C 264 | 10.240 | 64.607 | 18.939 | 1.00 28.61 | N |
| ATOM | 8634 | CA | GLY C 264 | 9.343 | 65.466 | 18.196 | 1.00 29.53 | C |
| ATOM | 8635 | C | GLY C 264 | 7.906 | 65.287 | 18.630 | 1.00 27.99 | C |
| ATOM | 8636 | O | GLY C 264 | 7.620 | 64.552 | 19.567 | 1.00 28.44 | O |
| ATOM | 8637 | N | ILE C 265 | 6.998 | 65.965 | 17.941 | 1.00 29.22 | N |
| ATOM | 8638 | CA | ILE C 265 | 5.583 | 65.887 | 18.261 | 1.00 30.10 | C |
| ATOM | 8639 | C | ILE C 265 | 4.971 | 64.558 | 17.828 | 1.00 29.40 | C |
| ATOM | 8640 | O | ILE C 265 | 3.998 | 64.096 | 18.415 | 1.00 29.25 | O |
| ATOM | 8641 | CB | ILE C 265 | 4.799 | 67.035 | 17.590 | 1.00 31.47 | C |
| ATOM | 8642 | CG1 | ILE C 265 | 3.338 | 67.006 | 18.048 | 1.00 32.48 | C |
| ATOM | 8643 | CG2 | ILE C 265 | 4.889 | 66.904 | 16.072 | 1.00 31.25 | C |
| ATOM | 8644 | CD1 | ILE C 265 | 2.518 | 68.190 | 17.578 | 1.00 35.59 | C |
| ATOM | 8645 | N | GLU C 266 | 5.544 | 63.944 | 16.803 | 1.00 29.03 | N |
| ATOM | 8646 | CA | GLU C 266 | 5.019 | 62.681 | 16.313 | 1.00 32.11 | C |
| ATOM | 8647 | C | GLU C 266 | 5.051 | 61.587 | 17.386 | 1.00 30.74 | C |
| ATOM | 8648 | O | GLU C 266 | 4.059 | 60.885 | 17.593 | 1.00 29.88 | O |
| ATOM | 8649 | CB | GLU C 266 | 5.786 | 62.249 | 15.061 | 1.00 35.53 | C |
| ATOM | 8650 | CG | GLU C 266 | 5.293 | 60.954 | 14.455 | 1.00 43.72 | C |
| ATOM | 8651 | CD | GLU C 266 | 5.841 | 60.713 | 13.058 | 1.00 47.45 | C |
| ATOM | 8652 | OE1 | GLU C 266 | 7.060 | 60.913 | 12.851 | 1.00 49.73 | O |
| ATOM | 8653 | OE2 | GLU C 266 | 5.052 | 60.315 | 12.172 | 1.00 48.96 | O |
| ATOM | 8654 | N | PRO C 267 | 6.190 | 61.423 | 18.080 | 1.00 29.41 | N |
| ATOM | 8655 | CA | PRO C 267 | 6.263 | 60.392 | 19.124 | 1.00 28.71 | C |
| ATOM | 8656 | C | PRO C 267 | 5.346 | 60.748 | 20.302 | 1.00 27.06 | C |
| ATOM | 8657 | O | PRO C 267 | 4.821 | 59.864 | 20.974 | 1.00 26.09 | O |
| ATOM | 8658 | CB | PRO C 267 | 7.739 | 60.404 | 19.530 | 1.00 28.60 | C |
| ATOM | 8659 | CG | PRO C 267 | 8.433 | 60.898 | 18.303 | 1.00 30.90 | C |
| ATOM | 8660 | CD | PRO C 267 | 7.522 | 61.998 | 17.827 | 1.00 30.59 | C |
| ATOM | 8661 | N | CYS C 268 | 5.169 | 62.045 | 20.550 | 1.00 25.06 | N |
| ATOM | 8662 | CA | CYS C 268 | 4.315 | 62.501 | 21.642 | 1.00 24.78 | C |
| ATOM | 8663 | C | CYS C 268 | 2.864 | 62.166 | 21.327 | 1.00 24.73 | C |
| ATOM | 8664 | O | CYS C 268 | 2.104 | 61.762 | 22.209 | 1.00 24.88 | O |
| ATOM | 8665 | CB | CYS C 268 | 4.465 | 64.012 | 21.854 | 1.00 23.86 | C |
| ATOM | 8666 | SG | CYS C 268 | 6.119 | 64.547 | 22.403 | 1.00 25.58 | S |
| ATOM | 8667 | N | ILE C 269 | 2.480 | 62.338 | 20.065 | 1.00 23.57 | N |
| ATOM | 8668 | CA | ILE C 269 | 1.117 | 62.042 | 19.647 | 1.00 23.64 | C |
| ATOM | 8669 | C | ILE C 269 | 0.857 | 60.541 | 19.777 | 1.00 22.63 | C |
| ATOM | 8670 | O | ILE C 269 | -0.175 | 60.126 | 20.294 | 1.00 23.09 | O |
| ATOM | 8671 | CB | ILE C 269 | 0.873 | 62.490 | 18.188 | 1.00 24.24 | C |
| ATOM | 8672 | CG1 | ILE C 269 | 0.855 | 64.018 | 18.119 | 1.00 23.57 | C |
| ATOM | 8673 | CG2 | ILE C 269 | -0.450 | 61.920 | 17.666 | 1.00 25.04 | C |
| ATOM | 8674 | CD1 | ILE C 269 | 0.822 | 64.573 | 16.711 | 1.00 22.15 | C |
| ATOM | 8675 | N | ALA C 270 | 1.805 | 59.735 | 19.315 | 1.00 21.83 | N |
| ATOM | 8676 | CA | ALA C 270 | 1.676 | 58.286 | 19.391 | 1.00 21.90 | C |
| ATOM | 8677 | C | ALA C 270 | 1.521 | 57.844 | 20.845 | 1.00 21.21 | C |
| ATOM | 8678 | O | ALA C 270 | 0.633 | 57.058 | 21.165 | 1.00 21.08 | O |
| ATOM | 8679 | CB | ALA C 270 | 2.894 | 57.618 | 18.760 | 1.00 20.37 | C |

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ATOM   8680  N   ARG C 271      2.376  58.363  21.723  1.00  20.85          N
ATOM   8681  CA  ARG C 271      2.319  58.015  23.141  1.00  21.34          C
ATOM   8682  C   ARG C 271      1.056  58.521  23.835  1.00  21.20          C
ATOM   8683  O   ARG C 271      0.455  57.806  24.630  1.00  21.96          O
ATOM   8684  CB  ARG C 271      3.574  58.531  23.858  1.00  20.92          C
ATOM   8685  CG  ARG C 271      4.789  57.659  23.594  1.00  20.41          C
ATOM   8686  CD  ARG C 271      6.077  58.251  24.134  1.00  20.12          C
ATOM   8687  NE  ARG C 271      7.194  57.340  23.891  1.00  20.88          N
ATOM   8688  CZ  ARG C 271      7.741  56.557  24.816  1.00  19.83          C
ATOM   8689  NH1 ARG C 271      7.288  56.572  26.062  1.00  20.05          N
ATOM   8690  NH2 ARG C 271      8.725  55.738  24.486  1.00  20.25          N
ATOM   8691  N   ALA C 272      0.648  59.747  23.532  1.00  21.74          N
ATOM   8692  CA  ALA C 272     -0.557  60.300  24.137  1.00  23.71          C
ATOM   8693  C   ALA C 272     -1.761  59.412  23.803  1.00  24.93          C
ATOM   8694  O   ALA C 272     -2.607  59.147  24.661  1.00  24.80          O
ATOM   8695  CB  ALA C 272     -0.795  61.728  23.637  1.00  21.85          C
ATOM   8696  N   LYS C 273     -1.840  58.951  22.558  1.00  25.25          N
ATOM   8697  CA  LYS C 273     -2.948  58.087  22.156  1.00  26.68          C
ATOM   8698  C   LYS C 273     -2.908  56.782  22.942  1.00  25.05          C
ATOM   8699  O   LYS C 273     -3.941  56.280  23.380  1.00  25.53          O
ATOM   8700  CB  LYS C 273     -2.890  57.786  20.653  1.00  27.07          C
ATOM   8701  CG  LYS C 273     -3.190  58.983  19.764  1.00  27.53          C
ATOM   8702  CD  LYS C 273     -3.037  58.615  18.301  1.00  29.05          C
ATOM   8703  CE  LYS C 273     -3.338  59.796  17.395  1.00  29.69          C
ATOM   8704  NZ  LYS C 273     -3.063  59.464  15.968  1.00  30.62          N
ATOM   8705  N   ALA C 274     -1.708  56.240  23.121  1.00  24.45          N
ATOM   8706  CA  ALA C 274     -1.530  54.995  23.859  1.00  23.25          C
ATOM   8707  C   ALA C 274     -1.906  55.159  25.336  1.00  23.70          C
ATOM   8708  O   ALA C 274     -2.459  54.240  25.944  1.00  22.45          O
ATOM   8709  CB  ALA C 274     -0.087  54.520  23.733  1.00  22.84          C
ATOM   8710  N   TYR C 275     -1.619  56.332  25.902  1.00  21.62          N
ATOM   8711  CA  TYR C 275     -1.918  56.601  27.313  1.00  20.71          C
ATOM   8712  C   TYR C 275     -3.355  57.032  27.576  1.00  19.89          C
ATOM   8713  O   TYR C 275     -3.870  56.832  28.678  1.00  19.26          O
ATOM   8714  CB  TYR C 275     -1.008  57.703  27.872  1.00  19.17          C
ATOM   8715  CG  TYR C 275      0.473  57.487  27.678  1.00  17.30          C
ATOM   8716  CD1 TYR C 275      1.012  56.202  27.606  1.00  17.77          C
ATOM   8717  CD2 TYR C 275      1.344  58.572  27.614  1.00  17.24          C
ATOM   8718  CE1 TYR C 275      2.390  56.002  27.473  1.00  17.02          C
ATOM   8719  CE2 TYR C 275      2.720  58.387  27.486  1.00  18.43          C
ATOM   8720  CZ  TYR C 275      3.234  57.098  27.417  1.00  17.81          C
ATOM   8721  OH  TYR C 275      4.586  56.907  27.303  1.00  17.69          O
ATOM   8722  N   ALA C 276     -3.989  57.630  26.570  1.00  18.87          N
ATOM   8723  CA  ALA C 276     -5.355  58.137  26.692  1.00  19.36          C
ATOM   8724  C   ALA C 276     -6.344  57.324  27.534  1.00  17.73          C
ATOM   8725  O   ALA C 276     -7.014  57.873  28.398  1.00  20.13          O
ATOM   8726  CB  ALA C 276     -5.943  58.378  25.297  1.00  21.30          C
ATOM   8727  N   PRO C 277     -6.451  56.012  27.290  1.00  19.38          N
ATOM   8728  CA  PRO C 277     -7.380  55.166  28.047  1.00  19.82          C
ATOM   8729  C   PRO C 277     -7.060  55.072  29.535  1.00  22.03          C
ATOM   8730  O   PRO C 277     -7.912  54.676  30.339  1.00  20.42          O
ATOM   8731  CB  PRO C 277     -7.243  53.801  27.365  1.00  18.19          C
ATOM   8732  CG  PRO C 277     -6.773  54.138  25.992  1.00  18.47          C
ATOM   8733  CD  PRO C 277     -5.777  55.227  26.244  1.00  19.33          C
ATOM   8734  N   PHE C 278     -5.827  55.433  29.888  1.00  22.59          N
ATOM   8735  CA  PHE C 278     -5.361  55.363  31.271  1.00  23.50          C
ATOM   8736  C   PHE C 278     -5.055  56.736  31.860  1.00  22.86          C
ATOM   8737  O   PHE C 278     -4.370  56.833  32.881  1.00  19.49          O
ATOM   8738  CB  PHE C 278     -4.085  54.522  31.334  1.00  23.16          C
ATOM   8739  CG  PHE C 278     -4.202  53.193  30.662  1.00  22.56          C
ATOM   8740  CD1 PHE C 278     -4.669  52.083  31.363  1.00  24.45          C
ATOM   8741  CD2 PHE C 278     -3.848  53.046  29.326  1.00  20.47          C
ATOM   8742  CE1 PHE C 278     -4.779  50.843  30.740  1.00  25.19          C
ATOM   8743  CE2 PHE C 278     -3.954  51.814  28.691  1.00  22.11          C
ATOM   8744  CZ  PHE C 278     -4.420  50.707  29.399  1.00  22.78          C
ATOM   8745  N   ALA C 279     -5.552  57.796  31.229  1.00  23.14          N
ATOM   8746  CA  ALA C 279     -5.260  59.138  31.722  1.00  23.83          C
ATOM   8747  C   ALA C 279     -6.431  60.114  31.687  1.00  23.39          C
ATOM   8748  O   ALA C 279     -7.051  60.313  30.642  1.00  25.14          O
ATOM   8749  CB  ALA C 279     -4.086  59.713  30.936  1.00  23.88          C
ATOM   8750  N   ASP C 280     -6.726  60.729  32.831  1.00  22.17          N
ATOM   8751  CA  ASP C 280     -7.809  61.702  32.906  1.00  21.82          C
ATOM   8752  C   ASP C 280     -7.359  62.958  32.152  1.00  22.41          C
ATOM   8753  O   ASP C 280     -8.174  63.701  31.603  1.00  20.61          O
ATOM   8754  CB  ASP C 280     -8.142  62.030  34.365  1.00  21.28          C
ATOM   8755  CG  ASP C 280     -8.692  60.828  35.120  1.00  23.87          C
ATOM   8756  OD1 ASP C 280     -9.615  60.173  34.595  1.00  22.98          O
ATOM   8757  OD2 ASP C 280     -8.212  60.537  36.236  1.00  23.55          O
ATOM   8758  N   LEU C 281     -6.050  63.184  32.129  1.00  20.51          N
ATOM   8759  CA  LEU C 281     -5.486  64.314  31.407  1.00  22.36          C
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| ATOM | 8760 | C   | LEU C 281 | -4.156 | 63.902 | 30.807 | 1.00 21.96 | C |
| ATOM | 8761 | O   | LEU C 281 | -3.438 | 63.082 | 31.376 | 1.00 22.08 | O |
| ATOM | 8762 | CB  | LEU C 281 | -5.281 | 65.518 | 32.331 | 1.00 21.62 | C |
| ATOM | 8763 | CG  | LEU C 281 | -6.555 | 66.166 | 32.868 | 1.00 23.52 | C |
| ATOM | 8764 | CD1 | LEU C 281 | -6.572 | 66.062 | 34.375 | 1.00 25.41 | C |
| ATOM | 8765 | CD2 | LEU C 281 | -6.623 | 67.620 | 32.435 | 1.00 22.96 | C |
| ATOM | 8766 | N   | ILE C 282 | -3.838 | 64.462 | 29.647 | 1.00 21.89 | N |
| ATOM | 8767 | CA  | ILE C 282 | -2.583 | 64.163 | 28.989 | 1.00 21.63 | C |
| ATOM | 8768 | C   | ILE C 282 | -1.821 | 65.459 | 28.803 | 1.00 21.39 | C |
| ATOM | 8769 | O   | ILE C 282 | -2.376 | 66.471 | 28.374 | 1.00 21.21 | O |
| ATOM | 8770 | CB  | ILE C 282 | -2.806 | 63.486 | 27.631 | 1.00 23.68 | C |
| ATOM | 8771 | CG1 | ILE C 282 | -3.576 | 62.178 | 27.840 | 1.00 24.60 | C |
| ATOM | 8772 | CG2 | ILE C 282 | -1.458 | 63.221 | 26.953 | 1.00 21.77 | C |
| ATOM | 8773 | CD1 | ILE C 282 | -3.879 | 61.422 | 26.567 | 1.00 27.38 | C |
| ATOM | 8774 | N   | TRP C 283 | -0.540 | 65.417 | 29.143 | 1.00 20.69 | N |
| ATOM | 8775 | CA  | TRP C 283 | 0.318 | 66.581 | 29.058 | 1.00 20.98 | C |
| ATOM | 8776 | C   | TRP C 283 | 1.588 | 66.266 | 28.296 | 1.00 22.34 | C |
| ATOM | 8777 | O   | TRP C 283 | 2.249 | 65.254 | 28.534 | 1.00 21.74 | O |
| ATOM | 8778 | CB  | TRP C 283 | 0.611 | 67.083 | 30.485 | 1.00 21.74 | C |
| ATOM | 8779 | CG  | TRP C 283 | 1.878 | 67.885 | 30.691 | 1.00 21.14 | C |
| ATOM | 8780 | CD1 | TRP C 283 | 2.527 | 68.670 | 29.778 | 1.00 18.23 | C |
| ATOM | 8781 | CD2 | TRP C 283 | 2.616 | 68.002 | 31.913 | 1.00 20.48 | C |
| ATOM | 8782 | NE1 | TRP C 283 | 3.622 | 69.265 | 30.356 | 1.00 20.36 | N |
| ATOM | 8783 | CE2 | TRP C 283 | 3.700 | 68.874 | 31.667 | 1.00 21.74 | C |
| ATOM | 8784 | CE3 | TRP C 283 | 2.463 | 67.457 | 33.194 | 1.00 20.41 | C |
| ATOM | 8785 | CZ2 | TRP C 283 | 4.632 | 69.213 | 32.658 | 1.00 21.75 | C |
| ATOM | 8786 | CZ3 | TRP C 283 | 3.390 | 67.795 | 34.182 | 1.00 21.21 | C |
| ATOM | 8787 | CH2 | TRP C 283 | 4.460 | 68.665 | 33.906 | 1.00 21.03 | C |
| ATOM | 8788 | N   | MET C 284 | 1.909 | 67.148 | 27.358 | 1.00 23.30 | N |
| ATOM | 8789 | CA  | MET C 284 | 3.091 | 67.007 | 26.531 | 1.00 23.53 | C |
| ATOM | 8790 | C   | MET C 284 | 4.071 | 68.151 | 26.797 | 1.00 24.94 | C |
| ATOM | 8791 | O   | MET C 284 | 3.743 | 69.318 | 26.579 | 1.00 24.52 | O |
| ATOM | 8792 | CB  | MET C 284 | 2.686 | 67.020 | 25.057 | 1.00 22.45 | C |
| ATOM | 8793 | CG  | MET C 284 | 3.841 | 67.257 | 24.113 | 1.00 25.73 | C |
| ATOM | 8794 | SD  | MET C 284 | 3.318 | 67.775 | 22.468 | 1.00 23.84 | S |
| ATOM | 8795 | CE  | MET C 284 | 4.924 | 67.892 | 21.669 | 1.00 28.97 | C |
| ATOM | 8796 | N   | GLU C 285 | 5.267 | 67.815 | 27.273 | 1.00 26.08 | N |
| ATOM | 8797 | CA  | GLU C 285 | 6.295 | 68.824 | 27.526 | 1.00 25.37 | C |
| ATOM | 8798 | C   | GLU C 285 | 6.763 | 69.385 | 26.186 | 1.00 26.21 | C |
| ATOM | 8799 | O   | GLU C 285 | 6.947 | 68.633 | 25.223 | 1.00 24.41 | O |
| ATOM | 8800 | CB  | GLU C 285 | 7.487 | 68.202 | 28.256 | 1.00 25.81 | C |
| ATOM | 8801 | CG  | GLU C 285 | 7.339 | 68.112 | 29.766 | 1.00 27.69 | C |
| ATOM | 8802 | CD  | GLU C 285 | 7.370 | 69.478 | 30.438 | 1.00 29.50 | C |
| ATOM | 8803 | OE1 | GLU C 285 | 6.392 | 70.247 | 30.309 | 1.00 30.91 | O |
| ATOM | 8804 | OE2 | GLU C 285 | 8.384 | 69.786 | 31.090 | 1.00 28.35 | O |
| ATOM | 8805 | N   | THR C 286 | 6.947 | 70.702 | 26.122 | 1.00 26.02 | N |
| ATOM | 8806 | CA  | THR C 286 | 7.404 | 71.352 | 24.897 | 1.00 27.87 | C |
| ATOM | 8807 | C   | THR C 286 | 8.596 | 72.256 | 25.189 | 1.00 28.06 | C |
| ATOM | 8808 | O   | THR C 286 | 8.779 | 72.712 | 26.316 | 1.00 27.61 | O |
| ATOM | 8809 | CB  | THR C 286 | 6.287 | 72.195 | 24.247 | 1.00 28.19 | C |
| ATOM | 8810 | OG1 | THR C 286 | 5.801 | 73.164 | 25.188 | 1.00 27.76 | O |
| ATOM | 8811 | CG2 | THR C 286 | 5.141 | 71.304 | 23.805 | 1.00 28.10 | C |
| ATOM | 8812 | N   | GLY C 287 | 9.402 | 72.509 | 24.164 | 1.00 28.29 | N |
| ATOM | 8813 | CA  | GLY C 287 | 10.575 | 73.343 | 24.334 | 1.00 30.46 | C |
| ATOM | 8814 | C   | GLY C 287 | 10.330 | 74.832 | 24.194 | 1.00 31.98 | C |
| ATOM | 8815 | O   | GLY C 287 | 11.230 | 75.632 | 24.449 | 1.00 33.91 | O |
| ATOM | 8816 | N   | THR C 288 | 9.121 | 75.210 | 23.787 | 1.00 31.31 | N |
| ATOM | 8817 | CA  | THR C 288 | 8.776 | 76.615 | 23.615 | 1.00 30.64 | C |
| ATOM | 8818 | C   | THR C 288 | 7.267 | 76.793 | 23.723 | 1.00 31.27 | C |
| ATOM | 8819 | O   | THR C 288 | 6.501 | 75.886 | 23.397 | 1.00 30.82 | O |
| ATOM | 8820 | CB  | THR C 288 | 9.188 | 77.140 | 22.221 | 1.00 31.07 | C |
| ATOM | 8821 | OG1 | THR C 288 | 8.341 | 76.550 | 21.227 | 1.00 29.82 | O |
| ATOM | 8822 | CG2 | THR C 288 | 10.640 | 76.791 | 21.908 | 1.00 29.92 | C |
| ATOM | 8823 | N   | PRO C 289 | 6.818 | 77.972 | 24.179 | 1.00 31.20 | N |
| ATOM | 8824 | CA  | PRO C 289 | 5.381 | 78.229 | 24.306 | 1.00 31.35 | C |
| ATOM | 8825 | C   | PRO C 289 | 4.811 | 78.482 | 22.906 | 1.00 32.43 | C |
| ATOM | 8826 | O   | PRO C 289 | 4.815 | 79.613 | 22.423 | 1.00 32.44 | O |
| ATOM | 8827 | CB  | PRO C 289 | 5.338 | 79.468 | 25.199 | 1.00 31.16 | C |
| ATOM | 8828 | CG  | PRO C 289 | 6.576 | 80.210 | 24.791 | 1.00 32.02 | C |
| ATOM | 8829 | CD  | PRO C 289 | 7.610 | 79.109 | 24.684 | 1.00 31.98 | C |
| ATOM | 8830 | N   | ASP C 290 | 4.320 | 77.428 | 22.261 | 1.00 32.41 | N |
| ATOM | 8831 | CA  | ASP C 290 | 3.797 | 77.544 | 20.900 | 1.00 32.57 | C |
| ATOM | 8832 | C   | ASP C 290 | 2.347 | 77.090 | 20.738 | 1.00 31.45 | C |
| ATOM | 8833 | O   | ASP C 290 | 2.058 | 75.896 | 20.770 | 1.00 30.74 | O |
| ATOM | 8834 | CB  | ASP C 290 | 4.685 | 76.733 | 19.955 | 1.00 33.55 | C |
| ATOM | 8835 | CG  | ASP C 290 | 4.426 | 77.045 | 18.494 | 1.00 34.85 | C |
| ATOM | 8836 | OD1 | ASP C 290 | 3.259 | 76.987 | 18.051 | 1.00 34.44 | O |
| ATOM | 8837 | OD2 | ASP C 290 | 5.404 | 77.343 | 17.786 | 1.00 37.19 | O |
| ATOM | 8838 | N   | LEU C 291 | 1.444 | 78.046 | 20.535 | 1.00 31.48 | N |
| ATOM | 8839 | CA  | LEU C 291 | 0.026 | 77.737 | 20.368 | 1.00 32.22 | C |

| ATOM | 8840 | C | LEU C 291 | -0.259 | 76.846 | 19.160 | 1.00 | 32.33 | C |
| ATOM | 8841 | O | LEU C 291 | -1.193 | 76.053 | 19.182 | 1.00 | 33.52 | O |
| ATOM | 8842 | CB | LEU C 291 | -0.796 | 79.029 | 20.252 | 1.00 | 30.32 | C |
| ATOM | 8843 | CG | LEU C 291 | -0.867 | 79.915 | 21.503 | 1.00 | 32.82 | C |
| ATOM | 8844 | CD1 | LEU C 291 | -1.652 | 81.177 | 21.185 | 1.00 | 30.93 | C |
| ATOM | 8845 | CD2 | LEU C 291 | -1.529 | 79.158 | 22.654 | 1.00 | 30.90 | C |
| ATOM | 8846 | N | GLU C 292 | 0.540 | 76.974 | 18.106 | 1.00 | 32.86 | N |
| ATOM | 8847 | CA | GLU C 292 | 0.333 | 76.162 | 16.915 | 1.00 | 33.35 | C |
| ATOM | 8848 | C | GLU C 292 | 0.757 | 74.721 | 17.178 | 1.00 | 32.52 | C |
| ATOM | 8849 | O | GLU C 292 | 0.089 | 73.779 | 16.753 | 1.00 | 30.29 | O |
| ATOM | 8850 | CB | GLU C 292 | 1.117 | 76.734 | 15.735 | 1.00 | 35.79 | C |
| ATOM | 8851 | CG | GLU C 292 | 0.269 | 76.939 | 14.490 | 1.00 | 40.89 | C |
| ATOM | 8852 | CD | GLU C 292 | -0.376 | 75.652 | 13.996 | 1.00 | 43.86 | C |
| ATOM | 8853 | OE1 | GLU C 292 | 0.361 | 74.720 | 13.599 | 1.00 | 44.34 | O |
| ATOM | 8854 | OE2 | GLU C 292 | -1.624 | 75.573 | 14.008 | 1.00 | 45.21 | O |
| ATOM | 8855 | N | ALA C 293 | 1.875 | 74.554 | 17.879 | 1.00 | 31.59 | N |
| ATOM | 8856 | CA | ALA C 293 | 2.359 | 73.222 | 18.207 | 1.00 | 30.96 | C |
| ATOM | 8857 | C | ALA C 293 | 1.299 | 72.586 | 19.101 | 1.00 | 29.68 | C |
| ATOM | 8858 | O | ALA C 293 | 0.918 | 71.423 | 18.919 | 1.00 | 29.22 | O |
| ATOM | 8859 | CB | ALA C 293 | 3.691 | 73.315 | 18.938 | 1.00 | 30.37 | C |
| ATOM | 8860 | N | ALA C 294 | 0.818 | 73.369 | 20.060 | 1.00 | 27.83 | N |
| ATOM | 8861 | CA | ALA C 294 | -0.211 | 72.915 | 20.983 | 1.00 | 27.18 | C |
| ATOM | 8862 | C | ALA C 294 | -1.461 | 72.463 | 20.225 | 1.00 | 28.65 | C |
| ATOM | 8863 | O | ALA C 294 | -2.045 | 71.426 | 20.546 | 1.00 | 28.27 | O |
| ATOM | 8864 | CB | ALA C 294 | -0.561 | 74.031 | 21.957 | 1.00 | 25.71 | C |
| ATOM | 8865 | N | ARG C 295 | -1.869 | 73.232 | 19.215 | 1.00 | 29.41 | N |
| ATOM | 8866 | CA | ARG C 295 | -3.056 | 72.878 | 18.430 | 1.00 | 32.11 | C |
| ATOM | 8867 | C | ARG C 295 | -2.833 | 71.562 | 17.694 | 1.00 | 30.99 | C |
| ATOM | 8868 | O | ARG C 295 | -3.719 | 70.708 | 17.620 | 1.00 | 30.56 | O |
| ATOM | 8869 | CB | ARG C 295 | -3.377 | 73.962 | 17.397 | 1.00 | 33.50 | C |
| ATOM | 8870 | CG | ARG C 295 | -4.593 | 73.635 | 16.539 | 1.00 | 36.23 | C |
| ATOM | 8871 | CD | ARG C 295 | -4.495 | 74.250 | 15.145 | 1.00 | 42.29 | C |
| ATOM | 8872 | NE | ARG C 295 | -4.321 | 75.698 | 15.185 | 1.00 | 47.06 | N |
| ATOM | 8873 | CZ | ARG C 295 | -5.221 | 76.553 | 15.664 | 1.00 | 51.38 | C |
| ATOM | 8874 | NH1 | ARG C 295 | -6.375 | 76.106 | 16.150 | 1.00 | 51.91 | N |
| ATOM | 8875 | NH2 | ARG C 295 | -4.967 | 77.859 | 15.661 | 1.00 | 51.82 | N |
| ATOM | 8876 | N | GLN C 296 | -1.637 | 71.421 | 17.144 | 1.00 | 30.45 | N |
| ATOM | 8877 | CA | GLN C 296 | -1.257 | 70.237 | 16.399 | 1.00 | 32.29 | C |
| ATOM | 3878 | C | GLN C 296 | -1.409 | 68.984 | 17.265 | 1.00 | 31.15 | C |
| ATOM | 8879 | O | GLN C 296 | -1.998 | 67.992 | 16.843 | 1.00 | 31.94 | O |
| ATOM | 8880 | CB | GLN C 296 | 0.189 | 70.393 | 15.935 | 1.00 | 34.70 | C |
| ATOM | 8881 | CG | GLN C 296 | 0.604 | 69.478 | 14.810 | 1.00 | 38.37 | C |
| ATOM | 8882 | CD | GLN C 296 | 1.981 | 69.831 | 14.282 | 1.00 | 41.50 | C |
| ATOM | 8883 | OE1 | GLN C 296 | 2.317 | 71.012 | 14.134 | 1.00 | 39.51 | O |
| ATOM | 8884 | NE2 | GLN C 296 | 2.784 | 68.810 | 13.987 | 1.00 | 42.11 | N |
| ATOM | 8885 | N | PHE C 297 | -0.874 | 69.046 | 18.479 | 1.00 | 29.56 | N |
| ATOM | 8886 | CA | PHE C 297 | -0.940 | 67.938 | 19.420 | 1.00 | 26.51 | C |
| ATOM | 8887 | C | PHE C 297 | -2.385 | 67.661 | 19.832 | 1.00 | 25.91 | C |
| ATOM | 8888 | O | PHE C 297 | -2.844 | 66.520 | 19.796 | 1.00 | 23.55 | O |
| ATOM | 8889 | CB | PHE C 297 | -0.099 | 68.272 | 20.657 | 1.00 | 25.48 | C |
| ATOM | 8890 | CG | PHE C 297 | -0.185 | 67.251 | 21.747 | 1.00 | 24.02 | C |
| ATOM | 8891 | CD1 | PHE C 297 | 0.395 | 65.994 | 21.590 | 1.00 | 23.25 | C |
| ATOM | 8892 | CD2 | PHE C 297 | -0.853 | 67.543 | 22.934 | 1.00 | 23.74 | C |
| ATOM | 8893 | CE1 | PHE C 297 | 0.312 | 65.041 | 22.598 | 1.00 | 23.40 | C |
| ATOM | 8894 | CE2 | PHE C 297 | -0.944 | 66.600 | 23.952 | 1.00 | 23.36 | C |
| ATOM | 8895 | CZ | PHE C 297 | -0.358 | 65.341 | 23.782 | 1.00 | 25.30 | C |
| ATOM | 8896 | N | SER C 298 | -3.094 | 68.717 | 20.217 | 1.00 | 25.69 | N |
| ATOM | 8897 | CA | SER C 298 | -4.484 | 68.600 | 20.648 | 1.00 | 28.02 | C |
| ATOM | 8898 | C | SER C 298 | -5.412 | 67.957 | 19.612 | 1.00 | 29.15 | C |
| ATOM | 8899 | O | SER C 298 | -6.151 | 67.021 | 19.926 | 1.00 | 28.42 | O |
| ATOM | 8900 | CB | SER C 298 | -5.032 | 69.977 | 21.018 | 1.00 | 28.10 | C |
| ATOM | 8901 | OG | SER C 298 | -6.406 | 69.892 | 21.348 | 1.00 | 32.10 | O |
| ATOM | 8902 | N | GLU C 299 | -5.376 | 68.468 | 18.384 | 1.00 | 29.11 | N |
| ATOM | 8903 | CA | GLU C 299 | -6.222 | 67.949 | 17.316 | 1.00 | 30.96 | C |
| ATOM | 8904 | C | GLU C 299 | -5.894 | 66.494 | 16.974 | 1.00 | 30.75 | C |
| ATOM | 8905 | O | GLU C 299 | -6.791 | 65.674 | 16.784 | 1.00 | 30.59 | O |
| ATOM | 8906 | CB | GLU C 299 | -6.092 | 68.830 | 16.066 | 1.00 | 32.55 | C |
| ATOM | 8907 | CG | GLU C 299 | -6.369 | 70.309 | 16.335 | 1.00 | 35.68 | C |
| ATOM | 8908 | CD | GLU C 299 | -6.545 | 71.131 | 15.069 | 1.00 | 38.98 | C |
| ATOM | 8909 | OE1 | GLU C 299 | -5.644 | 71.112 | 14.201 | 1.00 | 40.06 | O |
| ATOM | 8910 | OE2 | GLU C 299 | -7.589 | 71.807 | 14.946 | 1.00 | 40.52 | O |
| ATOM | 8911 | N | ALA C 300 | -4.609 | 66.169 | 16.900 | 1.00 | 30.77 | N |
| ATOM | 8912 | CA | ALA C 300 | -4.206 | 64.803 | 16.589 | 1.00 | 30.20 | C |
| ATOM | 8913 | C | ALA C 300 | -4.739 | 63.837 | 17.646 | 1.00 | 30.77 | C |
| ATOM | 8914 | O | ALA C 300 | -5.262 | 62.771 | 17.320 | 1.00 | 31.40 | O |
| ATOM | 8915 | CB | ALA C 300 | -2.690 | 64.711 | 16.505 | 1.00 | 29.04 | C |
| ATOM | 8916 | N | VAL C 301 | -4.619 | 64.220 | 18.913 | 1.00 | 30.56 | N |
| ATOM | 8917 | CA | VAL C 301 | -5.085 | 63.377 | 20.006 | 1.00 | 31.10 | C |
| ATOM | 8918 | C | VAL C 301 | -6.604 | 63.271 | 20.048 | 1.00 | 31.10 | C |
| ATOM | 8919 | O | VAL C 301 | -7.155 | 62.173 | 20.105 | 1.00 | 29.20 | O |

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ATOM   8920  CB   VAL C 301      -4.592  63.907  21.373  1.00 30.72           C
ATOM   8921  CG1  VAL C 301      -5.259  63.133  22.504  1.00 30.04           C
ATOM   8922  CG2  VAL C 301      -3.082  63.777  21.464  1.00 29.93           C
ATOM   8923  N    LYS C 302      -7.274  64.417  20.029  1.00 32.66           N
ATOM   8924  CA   LYS C 302      -8.729  64.446  20.080  1.00 34.87           C
ATOM   8925  C    LYS C 302      -9.368  63.784  18.863  1.00 35.42           C
ATOM   8926  O    LYS C 302     -10.536  63.404  18.902  1.00 36.63           O
ATOM   8927  CB   LYS C 302      -9.226  65.891  20.219  1.00 34.22           C
ATOM   8928  CG   LYS C 302      -9.113  66.445  21.637  1.00 35.59           C
ATOM   8929  CD   LYS C 302      -9.608  67.878  21.720  1.00 34.27           C
ATOM   8930  CE   LYS C 302      -9.592  68.391  23.155  1.00 36.77           C
ATOM   8931  NZ   LYS C 302     -10.549  67.668  24.045  1.00 34.44           N
ATOM   8932  N    ALA C 303      -8.604  63.640  17.787  1.00 35.68           N
ATOM   8933  CA   ALA C 303      -9.136  63.007  16.587  1.00 36.99           C
ATOM   8934  C    ALA C 303      -9.606  61.595  16.937  1.00 38.07           C
ATOM   8935  O    ALA C 303     -10.610  61.113  16.409  1.00 38.72           O
ATOM   8936  CB   ALA C 303      -8.069  62.958  15.501  1.00 36.92           C
ATOM   8937  N    GLU C 304      -8.883  60.938  17.839  1.00 37.86           N
ATOM   8938  CA   GLU C 304      -9.241  59.589  18.255  1.00 37.83           C
ATOM   8939  C    GLU C 304      -9.939  59.566  19.609  1.00 36.05           C
ATOM   8940  O    GLU C 304     -10.718  58.659  19.900  1.00 36.89           O
ATOM   8941  CB   GLU C 304      -8.000  58.695  18.281  1.00 38.77           C
ATOM · 8942  CG   GLU C 304      -7.616  58.173  16.903  1.00 42.69           C
ATOM   8943  CD   GLU C 304      -6.412  57.255  16.933  1.00 46.13           C
ATOM   8944  OE1  GLU C 304      -6.400  56.309  17.756  1.00 47.10           O
ATOM   8945  OE2  GLU C 304      -5.481  57.476  16.127  1.00 47.24           O
ATOM   8946  N    TYR C 305      -9.672  60.574  20.429  1.00 33.60           N
ATOM   8947  CA   TYR C 305     -10.285  60.658  21.746  1.00 32.92           C
ATOM   8948  C    TYR C 305     -10.821  62.069  21.945  1.00 33.29           C
ATOM   8949  O    TYR C 305     -10.209  62.887  22.626  1.00 34.02           O
ATOM   8950  CB   TYR C 305      -9.254  60.321  22.819  1.00 31.81           C
ATOM   8951  CG   TYR C 305      -8.720  58.909  22.727  1.00 30.31           C
ATOM   8952  CD1  TYR C 305      -9.419  57.837  23.287  1.00 30.03           C
ATOM   8953  CD2  TYR C 305      -7.512  58.641  22.086  1.00 29.06           C
ATOM   8954  CE1  TYR C 305      -8.926  56.533  23.214  1.00 29.75           C
ATOM   8955  CE2  TYR C 305      -7.009  57.340  22.006  1.00 30.70           C
ATOM   8956  CZ   TYR C 305      -7.719  56.294  22.574  1.00 30.90           C
ATOM   8957  OH   TYR C 305      -7.209  55.018  22.517  1.00 32.07           O
ATOM   8958  N    PRO C 306     -11.983  62.366  21.343  1.00 33.19           N
ATOM   8959  CA   PRO C 306     -12.669  63.659  21.398  1.00 32.86           C
ATOM   8960  C    PRO C 306     -12.795  64.291  22.775  1.00 31.98           C
ATOM   8961  O    PRO C 306     -12.606  65.495  22.924  1.00 32.92           O
ATOM   8962  CB   PRO C 306     -14.037  63.344  20.794  1.00 32.61           C
ATOM   8963  CG   PRO C 306     -13.718  62.301  19.798  1.00 32.16           C
ATOM   8964  CD   PRO C 306     -12.773  61.401  20.559  1.00 32.21           C
ATOM   8965  N    ASP C 307     -13.117  63.486  23.780  1.00 31.04           N
ATOM   8966  CA   ASP C 307     -13.297  64.016  25.125  1.00 30.92           C
ATOM   8967  C    ASP C 307     -12.048  64.055  26.002  1.00 30.03           C
ATOM   8968  O    ASP C 307     -12.125  64.417  27.175  1.00 30.10           O
ATOM   8969  CB   ASP C 307     -14.393  63.233  25.847  1.00 33.76           C
ATOM   8970  CG   ASP C 307     -15.700  63.205  25.068  1.00 35.90           C
ATOM   8971  OD1  ASP C 307     -15.989  64.189  24.355  1.00 35.89           O
ATOM   8972  OD2  ASP C 307     -16.442  62.206  25.184  1.00 36.92           O
ATOM   8973  N    GLN C 308     -10.897  63.698  25.441  1.00 29.08           N
ATOM   8974  CA   GLN C 308      -9.665  63.699  26.220  1.00 27.31           C
ATOM   8975  C    GLN C 308      -9.218  65.106  26.587  1.00 27.30           C
ATOM   8976  O    GLN C 308      -8.855  65.901  25.718  1.00 26.41           O
ATOM   8977  CB   GLN C 308      -8.547  62.994  25.456  1.00 24.72           C
ATOM   8978  CG   GLN C 308      -7.231  62.880  26.233  1.00 24.95           C
ATOM   8979  CD   GLN C 308      -7.372  62.082  27.526  1.00 23.70           C
ATOM   8980  OE1  GLN C 308      -7.223  62.627  28.625  1.00 21.90           O
ATOM   8981  NE2  GLN C 308      -7.660  60.791  27.398  1.00 18.63           N
ATOM   8982  N    MET C 309      -9.247  65.412  27.880  1.00 27.37           N
ATOM   8983  CA   MET C 309      -8.817  66.718  28.349  1.00 27.58           C
ATOM   8984  C    MET C 309      -7.294  66.712  28.403  1.00 26.33           C
ATOM   8985  O    MET C 309      -6.676  65.668  28.619  1.00 25.33           O
ATOM   8986  CB   MET C 309      -9.405  67.017  29.732  1.00 31.26           C
ATOM   8987  CG   MET C 309     -10.932  67.045  29.760  1.00 35.74           C
ATOM   8988  SD   MET C 309     -11.628  67.689  31.304  1.00 40.48           S
ATOM   8989  CE   MET C 309     -11.245  66.371  32.419  1.00 37.90           C
ATOM   8990  N    LEU C 310      -6.696  67.878  28.194  1.00 24.79           N
ATOM   8991  CA   LEU C 310      -5.246  68.006  28.194  1.00 24.38           C
ATOM   8992  C    LEU C 310      -4.759  68.970  29.277  1.00 24.33           C
ATOM   8993  O    LEU C 310      -5.550  69.700  29.878  1.00 25.30           O
ATOM   8994  CB   LEU C 310      -4.782  68.496  26.820  1.00 23.48           C
ATOM   8995  CG   LEU C 310      -5.312  67.705  25.619  1.00 25.10           C
ATOM   8996  CD1  LEU C 310      -4.966  68.422  24.329  1.00 23.10           C
ATOM   8997  CD2  LEU C 310      -4.727  66.301  25.629  1.00 24.45           C
ATOM   8998  N    ALA C 311      -3.455  68.956  29.534  1.00 22.39           N
ATOM   8999  CA   ALA C 311      -2.864  69.854  30.520  1.00 20.72           C
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ATOM   9000  C    ALA C 311     -1.656  70.512  29.865  1.00 20.56          C
ATOM   9001  O    ALA C 311     -0.984  69.902  29.030  1.00 19.58          O
ATOM   9002  CB   ALA C 311     -2.448  69.083  31.762  1.00 20.08          C
ATOM   9003  N    TYR C 312     -1.379  71.757  30.232  1.00 19.42          N
ATOM   9004  CA   TYR C 312     -0.255  72.460  29.636  1.00 20.37          C
ATOM   9005  C    TYR C 312      0.626  73.177  30.653  1.00 19.96          C
ATOM   9006  O    TYR C 312      0.141  73.857  31.552  1.00 20.40          O
ATOM   9007  CB   TYR C 312     -0.765  73.456  28.590  1.00 19.37          C
ATOM   9008  CG   TYR C 312      0.326  74.027  27.712  1.00 20.02          C
ATOM   9009  CD1  TYR C 312      1.127  75.083  28.152  1.00 19.21          C
ATOM   9010  CD2  TYR C 312      0.559  73.508  26.442  1.00 18.82          C
ATOM   9011  CE1  TYR C 312      2.130  75.608  27.344  1.00 20.62          C
ATOM   9012  CE2  TYR C 312      1.564  74.024  25.626  1.00 20.37          C
ATOM   9013  CZ   TYR C 312      2.343  75.072  26.083  1.00 20.56          C
ATOM   9014  OH   TYR C 312      3.346  75.572  25.288  1.00 22.02          O
ATOM   9015  N    ASN C 313      1.931  73.021  30.487  1.00 20.74          N
ATOM   9016  CA   ASN C 313      2.901  73.636  31.374  1.00 21.19          C
ATOM   9017  C    ASN C 313      3.409  74.964  30.825  1.00 21.65          C
ATOM   9018  O    ASN C 313      4.226  74.989  29.909  1.00 20.59          O
ATOM   9019  CB   ASN C 313      4.072  72.669  31.597  1.00 21.35          C
ATOM   9020  CG   ASN C 313      5.253  73.317  32.302  1.00 20.54          C
ATOM   9021  OD1  ASN C 313      5.115  74.347  32.963  1.00 20.60          O
ATOM   9022  ND2  ASN C 313      6.426  72.701  32.172  1.00 22.68          N
ATOM   9023  N    CYS C 314      2.903  76.063  31.379  1.00 22.96          N
ATOM   9024  CA   CYS C 314      3.335  77.402  30.976  1.00 24.77          C
ATOM   9025  C    CYS C 314      4.610  77.619  31.783  1.00 25.27          C
ATOM   9026  O    CYS C 314      4.622  78.342  32.776  1.00 26.86          O
ATOM   9027  CB   CYS C 314      2.278  78.439  31.360  1.00 22.87          C
ATOM   9028  SG   CYS C 314      0.679  78.220  30.530  1.00 26.09          S
ATOM   9029  N    SER C 315      5.682  76.982  31.326  1.00 25.33          N
ATOM   9030  CA   SER C 315      6.971  76.996  31.999  1.00 25.08          C
ATOM   9031  C    SER C 315      7.833  78.257  32.052  1.00 26.01          C
ATOM   9032  O    SER C 315      7.970  78.981  31.070  1.00 25.52          O
ATOM   9033  CB   SER C 315      7.817  75.852  31.441  1.00 23.10          C
ATOM   9034  OG   SER C 315      9.117  75.871  31.992  1.00 21.42          O
ATOM   9035  N    PRO C 316      8.417  78.537  33.230  1.00 27.54          N
ATOM   9036  CA   PRO C 316      9.287  79.703  33.414  1.00 26.73          C
ATOM   9037  C    PRO C 316     10.645  79.374  32.786  1.00 28.04          C
ATOM   9038  O    PRO C 316     11.580  80.176  32.827  1.00 27.83          O
ATOM   9039  CB   PRO C 316      9.372  79.837  34.933  1.00 25.97          C
ATOM   9040  CG   PRO C 316      8.049  79.295  35.391  1.00 26.56          C
ATOM   9041  CD   PRO C 316      7.924  78.056  34.533  1.00 27.35          C
ATOM   9042  N    SER C 317     10.746  78.173  32.221  1.00 28.69          N
ATOM   9043  CA   SER C 317     11.973  77.735  31.568  1.00 30.87          C
ATOM   9044  C    SER C 317     11.984  78.279  30.146  1.00 31.78          C
ATOM   9045  O    SER C 317     12.883  77.985  29.360  1.00 31.69          O
ATOM   9046  CB   SER C 317     12.067  76.206  31.544  1.00 31.50          C
ATOM   9047  OG   SER C 317     12.399  75.697  32.826  1.00 32.16          O
ATOM   9048  N    PHE C 318     10.956  79.057  29.823  1.00 31.96          N
ATOM   9049  CA   PHE C 318     10.849  79.689  28.518  1.00 32.11          C
ATOM   9050  C    PHE C 318     11.121  81.167  28.741  1.00 33.01          C
ATOM   9051  O    PHE C 318     10.769  81.706  29.787  1.00 33.61          O
ATOM   9052  CB   PHE C 318      9.433  79.575  27.935  1.00 32.07          C
ATOM   9053  CG   PHE C 318      8.955  78.170  27.711  1.00 30.43          C
ATOM   9054  CD1  PHE C 318      9.817  77.182  27.239  1.00 30.60          C
ATOM   9055  CD2  PHE C 318      7.614  77.852  27.912  1.00 31.13          C
ATOM   9056  CE1  PHE C 318      9.350  75.892  26.968  1.00 31.83          C
ATOM   9057  CE2  PHE C 318      7.129  76.562  27.642  1.00 32.87          C
ATOM   9058  CZ   PHE C 318      7.999  75.581  27.169  1.00 31.19          C
ATOM   9059  N    ASN C 319     11.751  81.817  27.768  1.00 33.78          N
ATOM   9060  CA   ASN C 319     12.003  83.251  27.858  1.00 33.51          C
ATOM   9061  C    ASN C 319     10.834  83.819  27.068  1.00 34.30          C
ATOM   9062  O    ASN C 319     10.947  84.114  25.880  1.00 35.71          O
ATOM   9063  CB   ASN C 319     13.334  83.611  27.194  1.00 33.50          C
ATOM   9064  CG   ASN C 319     13.646  85.102  27.268  1.00 33.27          C
ATOM   9065  OD1  ASN C 319     14.776  85.524  27.012  1.00 33.44          O
ATOM   9066  ND2  ASN C 319     12.642  85.905  27.606  1.00 31.25          N
ATOM   9067  N    TRP C 320      9.702  83.953  27.747  1.00 34.93          N
ATOM   9068  CA   TRP C 320      8.468  84.417  27.135  1.00 34.43          C
ATOM   9069  C    TRP C 320      8.499  85.571  26.145  1.00 36.86          C
ATOM   9070  O    TRP C 320      8.026  85.414  25.014  1.00 36.66          O
ATOM   9071  CB   TRP C 320      7.430  84.683  28.224  1.00 32.38          C
ATOM   9072  CG   TRP C 320      7.000  83.408  28.874  1.00 31.41          C
ATOM   9073  CD1  TRP C 320      7.668  82.716  29.845  1.00 31.38          C
ATOM   9074  CD2  TRP C 320      5.856  82.616  28.531  1.00 29.82          C
ATOM   9075  NE1  TRP C 320      7.013  81.541  30.126  1.00 31.32          N
ATOM   9076  CE2  TRP C 320      5.897  81.454  29.334  1.00 30.74          C
ATOM   9077  CE3  TRP C 320      4.801  82.774  27.621  1.00 28.03          C
ATOM   9078  CZ2  TRP C 320      4.920  80.453  29.256  1.00 28.51          C
ATOM   9079  CZ3  TRP C 320      3.831  81.780  27.544  1.00 27.29          C
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ATOM   9080  CH2 TRP C 320       3.899  80.635  28.359  1.00 27.14           C
ATOM   9081  N   LYS C 321       9.033  86.723  26.536  1.00 37.78           N
ATOM   9082  CA  LYS C 321       9.061  87.847  25.605  1.00 38.63           C
ATOM   9083  C   LYS C 321      10.008  87.623  24.435  1.00 40.16           C
ATOM   9084  O   LYS C 321       9.965  88.355  23.450  1.00 41.57           O
ATOM   9085  CB  LYS C 321       9.404  89.150  26.332  1.00 38.25           C
ATOM   9086  CG  LYS C 321       8.239  89.692  27.165  1.00 38.65           C
ATOM   9087  CD  LYS C 321       8.544  91.059  27.756  1.00 39.42           C
ATOM   9088  CE  LYS C 321       8.609  92.135  26.685  1.00 41.15           C
ATOM   9089  NZ  LYS C 321       7.278  92.400  26.067  1.00 40.66           N
ATOM   9090  N   LYS C 322      10.856  86.606  24.533  1.00 41.49           N
ATOM   9091  CA  LYS C 322      11.784  86.300  23.451  1.00 42.79           C
ATOM   9092  C   LYS C 322      11.080  85.462  22.380  1.00 42.96           C
ATOM   9093  O   LYS C 322      11.551  85.362  21.247  1.00 43.78           O
ATOM   9094  CB  LYS C 322      12.999  85.535  23.990  1.00 43.54           C
ATOM   9095  CG  LYS C 322      13.958  85.040  22.911  1.00 45.90           C
ATOM   9096  CD  LYS C 322      15.152  84.297  23.506  1.00 49.13           C
ATOM   9097  CE  LYS C 322      16.117  83.818  22.416  1.00 51.29           C
ATOM   9098  NZ  LYS C 322      17.318  83.118  22.970  1.00 52.13           N
ATOM   9099  N   HIS C 323       9.945  84.870  22.739  1.00 41.53           N
ATOM   9100  CA  HIS C 323       9.201  84.025  21.809  1.00 41.89           C
ATOM   9101  C   HIS C 323       7.864  84.597  21.352  1.00 40.39           C
ATOM   9102  O   HIS C 323       7.428  84.337  20.229  1.00 40.17           O
ATOM   9103  CB  HIS C 323       8.949  82.644  22.435  1.00 43.36           C
ATOM   9104  CG  HIS C 323      10.183  81.808  22.582  1.00 46.06           C
ATOM   9105  ND1 HIS C 323      10.884  81.319  21.501  1.00 47.50           N
ATOM   9106  CD2 HIS C 323      10.852  81.393  23.683  1.00 47.12           C
ATOM   9107  CE1 HIS C 323      11.933  80.640  21.929  1.00 48.17           C
ATOM   9108  NE2 HIS C 323      11.938  80.670  23.249  1.00 47.82           N
ATOM   9109  N   LEU C 324       7.219  85.379  22.210  1.00 37.07           N
ATOM   9110  CA  LEU C 324       5.911  85.927  21.884  1.00 34.35           C
ATOM   9111  C   LEU C 324       5.766  87.420  22.166  1.00 35.46           C
ATOM   9112  O   LEU C 324       6.525  87.987  22.953  1.00 34.51           O
ATOM   9113  CB  LEU C 324       4.849  85.172  22.683  1.00 32.79           C
ATOM   9114  CG  LEU C 324       4.932  83.642  22.707  1.00 32.44           C
ATOM   9115  CD1 LEU C 324       3.953  83.086  23.738  1.00 28.39           C
ATOM   9116  CD2 LEU C 324       4.630  83.090  21.317  1.00 30.23           C
ATOM   9117  N   ASP C 325       4.786  88.049  21.516  1.00 35.33           N
ATOM   9118  CA  ASP C 325       4.510  89.467  21.737  1.00 36.94           C
ATOM   9119  C   ASP C 325       3.497  89.544  22.878  1.00 36.54           C
ATOM   9120  O   ASP C 325       2.855  88.541  23.206  1.00 36.77           O
ATOM   9121  CB  ASP C 325       3.947  90.141  20.475  1.00 38.18           C
ATOM   9122  CG  ASP C 325       2.673  89.482  19.959  1.00 39.71           C
ATOM   9123  OD1 ASP C 325       1.807  89.093  20.770  1.00 40.49           O
ATOM   9124  OD2 ASP C 325       2.527  89.373  18.725  1.00 41.97           O
ATOM   9125  N   ASP C 326       3.350  90.719  23.483  1.00 35.79           N
ATOM   9126  CA  ASP C 326       2.431  90.876  24.606  1.00 34.70           C
ATOM   9127  C   ASP C 326       1.001  90.469  24.308  1.00 34.43           C
ATOM   9128  O   ASP C 326       0.287  90.004  25.198  1.00 34.60           O
ATOM   9129  CB  ASP C 326       2.445  92.317  25.125  1.00 34.55           C
ATOM   9130  CG  ASP C 326       3.798  92.723  25.666  1.00 35.04           C
ATOM   9131  OD1 ASP C 326       4.468  91.868  26.286  1.00 33.80           O
ATOM   9132  OD2 ASP C 326       4.186  93.896  25.480  1.00 36.67           O
ATOM   9133  N   ALA C 327       0.576  90.644  23.063  1.00 33.43           N
ATOM   9134  CA  ALA C 327      -0.783  90.283  22.686  1.00 33.81           C
ATOM   9135  C   ALA C 327      -1.004  88.776  22.832  1.00 33.33           C
ATOM   9136  O   ALA C 327      -1.985  88.341  23.438  1.00 33.01           O
ATOM   9137  CB  ALA C 327      -1.062  90.721  21.254  1.00 34.68           C
ATOM   9138  N   THR C 328      -0.085  87.987  22.279  1.00 32.26           N
ATOM   9139  CA  THR C 328      -0.176  86.530  22.346  1.00 31.04           C
ATOM   9140  C   THR C 328      -0.024  86.060  23.793  1.00 29.50           C
ATOM   9141  O   THR C 328      -0.746  85.171  24.250  1.00 27.87           O
ATOM   9142  CB  THR C 328       0.920  85.864  21.485  1.00 32.71           C
ATOM   9143  OG1 THR C 328       0.842  86.356  20.140  1.00 33.85           O
ATOM   9144  CG2 THR C 328       0.741  84.351  21.471  1.00 32.95           C
ATOM   9145  N   ILE C 329       0.924  86.662  24.503  1.00 27.88           N
ATOM   9146  CA  ILE C 329       1.173  86.325  25.898  1.00 27.88           C
ATOM   9147  C   ILE C 329      -0.112  86.481  26.699  1.00 28.36           C
ATOM   9148  O   ILE C 329      -0.446  85.630  27.523  1.00 30.22           O
ATOM   9149  CB  ILE C 329       2.254  87.248  26.505  1.00 27.56           C
ATOM   9150  CG1 ILE C 329       3.627  86.872  25.942  1.00 28.89           C
ATOM   9151  CG2 ILE C 329       2.236  87.159  28.019  1.00 28.19           C
ATOM   9152  CD1 ILE C 329       4.766  87.754  26.443  1.00 27.39           C
ATOM   9153  N   ALA C 330      -0.833  87.566  26.435  1.00 26.82           N
ATOM   9154  CA  ALA C 330      -2.081  87.866  27.131  1.00 28.27           C
ATOM   9155  C   ALA C 330      -3.214  86.885  26.843  1.00 28.47           C
ATOM   9156  O   ALA C 330      -4.046  86.613  27.714  1.00 28.47           O
ATOM   9157  CB  ALA C 330      -2.536  89.298  26.787  1.00 26.66           C
ATOM   9158  N   LYS C 331      -3.253  86.356  25.625  1.00 28.26           N
ATOM   9159  CA  LYS C 331      -4.311  85.428  25.242  1.00 29.49           C
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ATOM   9160  C    LYS C 331      -3.871  83.967  25.325  1.00 29.12           C
ATOM   9161  O    LYS C 331      -4.686  83.061  25.154  1.00 28.21           O
ATOM   9162  CB   LYS C 331      -4.767  85.724  23.811  1.00 30.97           C
ATOM   9163  CG   LYS C 331      -3.662  85.498  22.775  1.00 35.00           C
ATOM   9164  CD   LYS C 331      -4.160  85.630  21.336  1.00 37.69           C
ATOM   9165  CE   LYS C 331      -3.074  85.200  20.345  1.00 37.55           C
ATOM   9166  NZ   LYS C 331      -3.530  85.239  18.924  1.00 39.14           N
ATOM   9167  N    PHE C 332      -2.589  83.741  25.598  1.00 27.86           N
ATOM   9168  CA   PHE C 332      -2.045  82.386  25.660  1.00 27.52           C
ATOM   9169  C    PHE C 332      -2.924  81.323  26.317  1.00 26.83           C
ATOM   9170  O    PHE C 332      -3.333  80.364  25.657  1.00 26.08           O
ATOM   9171  CB   PHE C 332      -0.681  82.385  26.342  1.00 27.59           C
ATOM   9172  CG   PHE C 332       0.156  81.197  25.988  1.00 29.71           C
ATOM   9173  CD1  PHE C 332       0.737  81.096  24.728  1.00 29.73           C
ATOM   9174  CD2  PHE C 332       0.333  80.157  26.896  1.00 29.91           C
ATOM   9175  CE1  PHE C 332       1.485  79.974  24.370  1.00 31.37           C
ATOM   9176  CE2  PHE C 332       1.077  79.030  26.552  1.00 30.11           C
ATOM   9177  CZ   PHE C 332       1.655  78.937  25.286  1.00 30.43           C
ATOM   9178  N    GLN C 333      -3.216  81.483  27.605  1.00 25.69           N
ATOM   9179  CA   GLN C 333      -4.032  80.495  28.308  1.00 26.37           C
ATOM   9180  C    GLN C 333      -5.447  80.360  27.763  1.00 26.58           C
ATOM   9181  O    GLN C 333      -5.957  79.245  27.623  1.00 24.81           O
ATOM   9182  CB   GLN C 333      -4.105  80.802  29.805  1.00 24.00           C
ATOM   9183  CG   GLN C 333      -2.774  80.730  30.523  1.00 24.74           C
ATOM   9184  CD   GLN C 333      -2.914  80.207  31.942  1.00 23.88           C
ATOM   9185  OE1  GLN C 333      -3.960  80.364  32.574  1.00 22.09           O
ATOM   9186  NE2  GLN C 333      -1.851  79.590  32.454  1.00 24.21           N
ATOM   9187  N    LYS C 334      -6.085  81.488  27.467  1.00 27.56           N
ATOM   9188  CA   LYS C 334      -7.446  81.459  26.941  1.00 30.11           C
ATOM   9189  C    LYS C 334      -7.486  80.646  25.652  1.00 30.02           C
ATOM   9190  O    LYS C 334      -8.434  79.904  25.410  1.00 30.74           O
ATOM   9191  CB   LYS C 334      -7.960  82.880  26.679  1.00 32.63           C
ATOM   9192  CG   LYS C 334      -9.424  82.924  26.261  1.00 35.02           C
ATOM   9193  CD   LYS C 334      -9.912  84.352  26.041  1.00 39.13           C
ATOM   9194  CE   LYS C 334     -11.379  84.367  25.608  1.00 41.15           C
ATOM   9195  NZ   LYS C 334     -12.256  83.679  26.609  1.00 42.07           N
ATOM   9196  N    GLU C 335      -6.442  80.787  24.839  1.00 30.13           N
ATOM   9197  CA   GLU C 335      -6.327  80.060  23.581  1.00 31.37           C
ATOM   9198  C    GLU C 335      -6.177  78.564  23.837  1.00 30.09           C
ATOM   9199  O    GLU C 335      -6.890  77.749  23.253  1.00 29.77           O
ATOM   9200  CB   GLU C 335      -5.120  80.569  22.792  1.00 33.85           C
ATOM   9201  CG   GLU C 335      -5.344  81.920  22.140  1.00 38.68           C
ATOM   9202  CD   GLU C 335      -6.404  81.860  21.055  1.00 40.27           C
ATOM   9203  OE1  GLU C 335      -6.214  81.091  20.090  1.00 40.59           O
ATOM   9204  OE2  GLU C 335      -7.422  82.575  21.167  1.00 41.95           O
ATOM   9205  N    LEU C 336      -5.240  78.211  24.710  1.00 28.53           N
ATOM   9206  CA   LEU C 336      -5.008  76.816  25.056  1.00 25.94           C
ATOM   9207  C    LEU C 336      -6.301  76.167  25.542  1.00 25.02           C
ATOM   9208  O    LEU C 336      -6.595  75.024  25.208  1.00 25.04           O
ATOM   9209  CB   LEU C 336      -3.929  76.710  26.139  1.00 25.55           C
ATOM   9210  CG   LEU C 336      -2.493  77.037  25.711  1.00 24.05           C
ATOM   9211  CD1  LEU C 336      -1.560  76.884  26.899  1.00 25.44           C
ATOM   9212  CD2  LEU C 336      -2.070  76.109  24.583  1.00 24.35           C
ATOM   9213  N    ALA C 337      -7.074  76.903  26.331  1.00 25.27           N
ATOM   9214  CA   ALA C 337      -8.332  76.377  26.845  1.00 26.18           C
ATOM   9215  C    ALA C 337      -9.264  76.028  25.685  1.00 26.81           C
ATOM   9216  O    ALA C 337      -9.882  74.957  25.665  1.00 26.76           O
ATOM   9217  CB   ALA C 337      -8.997  77.402  27.770  1.00 25.41           C
ATOM   9218  N    ALA C 338      -9.350  76.931  24.714  1.00 25.76           N
ATOM   9219  CA   ALA C 338     -10.206  76.724  23.555  1.00 26.46           C
ATOM   9220  C    ALA C 338      -9.798  75.460  22.809  1.00 26.84           C
ATOM   9221  O    ALA C 338     -10.585  74.894  22.052  1.00 26.08           O
ATOM   9222  CB   ALA C 338     -10.124  77.926  22.629  1.00 25.72           C
ATOM   9223  N    MET C 339      -8.570  75.008  23.035  1.00 26.28           N
ATOM   9224  CA   MET C 339      -8.087  73.819  22.359  1.00 26.40           C
ATOM   9225  C    MET C 339      -8.056  72.544  23.201  1.00 26.58           C
ATOM   9226  O    MET C 339      -7.397  71.570  22.840  1.00 26.97           O
ATOM   9227  CB   MET C 339      -6.712  74.100  21.764  1.00 27.16           C
ATOM   9228  CG   MET C 339      -6.747  75.248  20.780  1.00 29.44           C
ATOM   9229  SD   MET C 339      -5.259  75.394  19.821  1.00 32.17           S
ATOM   9230  CE   MET C 339      -4.166  76.125  21.063  1.00 27.79           C
ATOM   9231  N    GLY C 340      -8.773  72.542  24.317  1.00 25.67           N
ATOM   9232  CA   GLY C 340      -8.816  71.349  25.145  1.00 25.64           C
ATOM   9233  C    GLY C 340      -7.863  71.279  26.323  1.00 24.80           C
ATOM   9234  O    GLY C 340      -7.897  70.313  27.082  1.00 24.84           O
ATOM   9235  N    PHE C 341      -7.011  72.286  26.477  1.00 24.53           N
ATOM   9236  CA   PHE C 341      -6.070  72.318  27.591  1.00 25.93           C
ATOM   9237  C    PHE C 341      -6.794  72.918  28.786  1.00 25.36           C
ATOM   9238  O    PHE C 341      -6.781  74.132  28.986  1.00 26.25           O
ATOM   9239  CB   PHE C 341      -4.848  73.155  27.210  1.00 24.55           C
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ATOM   9240  CG   PHE C 341    -4.051  72.562  26.090  1.00 25.82       C
ATOM   9241  CD1  PHE C 341    -3.235  71.457  26.313  1.00 26.97       C
ATOM   9242  CD2  PHE C 341    -4.152  73.072  24.799  1.00 26.31       C
ATOM   9243  CE1  PHE C 341    -2.529  70.862  25.265  1.00 28.39       C
ATOM   9244  CE2  PHE C 341    -3.455  72.489  23.741  1.00 27.41       C
ATOM   9245  CZ   PHE C 341    -2.641  71.382  23.971  1.00 28.57       C
ATOM   9246  N    LYS C 342    -7.424  72.050  29.575  1.00 25.25       N
ATOM   9247  CA   LYS C 342    -8.205  72.467  30.736  1.00 24.74       C
ATOM   9248  C    LYS C 342    -7.471  72.643  32.065  1.00 25.46       C
ATOM   9249  O    LYS C 342    -8.076  73.082  33.046  1.00 25.14       O
ATOM   9250  CB   LYS C 342    -9.383  71.511  30.921  1.00 26.81       C
ATOM   9251  CG   LYS C 342   -10.301  71.434  29.707  1.00 27.93       C
ATOM   9252  CD   LYS C 342   -10.817  72.816  29.321  1.00 31.97       C
ATOM   9253  CE   LYS C 342   -11.725  72.754  28.097  1.00 33.53       C
ATOM   9254  NZ   LYS C 342   -12.111  74.119  27.636  1.00 35.83       N
ATOM   9255  N    PHE C 343    -6.192  72.279  32.121  1.00 23.85       N
ATOM   9256  CA   PHE C 343    -5.416  72.477  33.348  1.00 22.72       C
ATOM   9257  C    PHE C 343    -4.077  73.077  32.958  1.00 21.61       C
ATOM   9258  O    PHE C 343    -3.242  72.421  32.331  1.00 21.65       O
ATOM   9259  CB   PHE C 343    -5.185  71.175  34.126  1.00 21.92       C
ATOM   9260  CG   PHE C 343    -4.461  71.389  35.433  1.00 22.55       C
ATOM   9261  CD1  PHE C 343    -5.078  72.070  36.476  1.00 22.10       C
ATOM   9262  CD2  PHE C 343    -3.146  70.966  35.602  1.00 21.12       C
ATOM   9263  CE1  PHE C 343    -4.400  72.332  37.665  1.00 20.58       C
ATOM   9264  CE2  PHE C 343    -2.463  71.225  36.788  1.00 20.38       C
ATOM   9265  CZ   PHE C 343    -3.088  71.908  37.818  1.00 20.97       C
ATOM   9266  N    GLN C 344    -3.879  74.332  33.341  1.00 20.04       N
ATOM   9267  CA   GLN C 344    -2.664  75.044  32.998  1.00 19.03       C
ATOM   9268  C    GLN C 344    -1.981  75.526  34.265  1.00 18.66       C
ATOM   9269  O    GLN C 344    -2.636  75.930  35.224  1.00/18.49       O
ATOM   9270  CB   GLN C 344    -3.023  76.203  32.067  1.00 19.87       C
ATOM   9271  CG   GLN C 344    -3.993  75.769  30.962  1.00 20.16       C
ATOM   9272  CD   GLN C 344    -4.333  76.880  29.989  1.00 21.24       C
ATOM   9273  OE1  GLN C 344    -5.338  76.813  29.280  1.00 22.41       O
ATOM   9274  NE2  GLN C 344    -3.495  77.900  29.943  1.00 22.29       N
ATOM   9275  N    PHE C 345    -0.657  75.494  34.264  1.00 17.28       N
ATOM   9276  CA   PHE C 345     0.083  75.869  35.451  1.00 18.52       C
ATOM   9277  C    PHE C 345     1.479  76.389  35.170  1.00 18.14       C
ATOM   9278  O    PHE C 345     2.131  75.982  34.215  1.00 18.94       O
ATOM   9279  CB   PHE C 345     0.203  74.643  36.365  1.00 19.26       C
ATOM   9280  CG   PHE C 345     0.726  73.409  35.654  1.00 20.78       C
ATOM   9281  CD1  PHE C 345    -0.114  72.645  34.848  1.00 18.73       C
ATOM   9282  CD2  PHE C 345     2.062  73.037  35.764  1.00 19.43       C
ATOM   9283  CE1  PHE C 345     0.367  71.529  34.160  1.00 20.06       C
ATOM   9284  CE2  PHE C 345     2.556  71.924  35.081  1.00 20.22       C
ATOM   9285  CZ   PHE C 345     1.705  71.168  34.276  1.00 21.16       C
ATOM   9286  N    ILE C 346     1.935  77.294  36.023  1.00 20.15       N
ATOM   9287  CA   ILE C 346     3.279  77.829  35.902  1.00 20.22       C
ATOM   9288  C    ILE C 346     4.061  77.094  36.991  1.00 19.21       C
ATOM   9289  O    ILE C 346     4.007  77.449  38.166  1.00 19.41       O
ATOM   9290  CB   ILE C 346     3.315  79.343  36.155  1.00 20.04       C
ATOM   9291  CG1  ILE C 346     2.413  80.057  35.143  1.00 20.22       C
ATOM   9292  CG2  ILE C 346     4.753  79.852  36.036  1.00 19.46       C
ATOM   9293  CD1  ILE C 346     2.448  81.572  35.245  1.00 17.71       C
ATOM   9294  N    THR C 347     4.762  76.050  36.575  1.00 19.07       N
ATOM   9295  CA   THR C 347     5.538  75.197  37.465  1.00 20.15       C
ATOM   9296  C    THR C 347     6.395  75.879  38.521  1.00 21.42       C
ATOM   9297  O    THR C 347     6.257  75.605  39.717  1.00 20.95       O
ATOM   9298  CB   THR C 347     6.476  74.304  36.661  1.00 20.96       C
ATOM   9299  OG1  THR C 347     7.263  75.134  35.798  1.00 22.49       O
ATOM   9300  CG2  THR C 347     5.690  73.288  35.837  1.00 18.22       C
ATOM   9301  N    LEU C 348     7.284  76.761  38.078  1.00 19.46       N
ATOM   9302  CA   LEU C 348     8.205  77.410  38.997  1.00 20.59       C
ATOM   9303  C    LEU C 348     7.820  78.805  39.482  1.00 20.82       C
ATOM   9304  O    LEU C 348     8.689  79.622  39.754  1.00 20.56       O
ATOM   9305  CB   LEU C 348     9.602  77.445  38.366  1.00 19.82       C
ATOM   9306  CG   LEU C 348    10.066  76.151  37.679  1.00 22.54       C
ATOM   9307  CD1  LEU C 348    11.551  76.260  37.307  1.00 22.47       C
ATOM   9308  CD2  LEU C 348     9.837  74.956  38.605  1.00 23.27       C
ATOM   9309  N    ALA C 349     6.526  79.074  39.607  1.00 20.59       N
ATOM   9310  CA   ALA C 349     6.080  80.381  40.077  1.00 21.56       C
ATOM   9311  C    ALA C 349     6.568  80.658  41.503  1.00 21.01       C
ATOM   9312  O    ALA C 349     7.029  81.753  41.813  1.00 21.50       O
ATOM   9313  CB   ALA C 349     4.557  80.466  40.017  1.00 20.54       C
ATOM   9314  N    GLY C 350     6.462  79.660  42.370  1.00 21.19       N
ATOM   9315  CA   GLY C 350     6.892  79.836  43.744  1.00 19.75       C
ATOM   9316  C    GLY C 350     8.377  80.103  43.862  1.00 21.18       C
ATOM   9317  O    GLY C 350     8.791  81.030  44.566  1.00 23.04       O
ATOM   9318  N    PHE C 351     9.187  79.294  43.185  1.00 19.32       N
ATOM   9319  CA   PHE C 351    10.637  79.471  43.230  1.00 20.41       C
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|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 9320 | C | PHE | C | 351 | 11.024 | 80.896 | 42.840 | 1.00 | 21.33 | C |
| ATOM | 9321 | O | PHE | C | 351 | 11.840 | 81.532 | 43.510 | 1.00 | 21.50 | O |
| ATOM | 9322 | CB | PHE | C | 351 | 11.329 | 78.491 | 42.278 | 1.00 | 20.09 | C |
| ATOM | 9323 | CG | PHE | C | 351 | 12.807 | 78.754 | 42.092 | 1.00 | 21.71 | C |
| ATOM | 9324 | CD1 | PHE | C | 351 | 13.744 | 78.237 | 42.989 | 1.00 | 21.06 | C |
| ATOM | 9325 | CD2 | PHE | C | 351 | 13.262 | 79.517 | 41.013 | 1.00 | 20.88 | C |
| ATOM | 9326 | CE1 | PHE | C | 351 | 15.112 | 78.471 | 42.813 | 1.00 | 20.07 | C |
| ATOM | 9327 | CE2 | PHE | C | 351 | 14.630 | 79.760 | 40.826 | 1.00 | 19.61 | C |
| ATOM | 9328 | CZ | PHE | C | 351 | 15.556 | 79.235 | 41.727 | 1.00 | 21.10 | C |
| ATOM | 9329 | N | HIS | C | 352 | 10.442 | 81.397 | 41.754 | 1.00 | 20.33 | N |
| ATOM | 9330 | CA | HIS | C | 352 | 10.778 | 82.734 | 41.290 | 1.00 | 21.44 | C |
| ATOM | 9331 | C | HIS | C | 352 | 10.232 | 83.844 | 42.173 | 1.00 | 21.77 | C |
| ATOM | 9332 | O | HIS | C | 352 | 10.964 | 84.769 | 42.516 | 1.00 | 24.17 | O |
| ATOM | 9333 | CB | HIS | C | 352 | 10.341 | 82.918 | 39.832 | 1.00 | 20.39 | C |
| ATOM | 9334 | CG | HIS | C | 352 | 11.227 | 82.208 | 38.856 | 1.00 | 20.33 | C |
| ATOM | 9335 | ND1 | HIS | C | 352 | 12.545 | 82.561 | 38.658 | 1.00 | 20.77 | N |
| ATOM | 9336 | CD2 | HIS | C | 352 | 11.009 | 81.124 | 38.074 | 1.00 | 21.10 | C |
| ATOM | 9337 | CE1 | HIS | C | 352 | 13.102 | 81.723 | 37.802 | 1.00 | 18.97 | C |
| ATOM | 9338 | NE2 | HIS | C | 352 | 12.192 | 80.840 | 37.433 | 1.00 | 21.65 | N |
| ATOM | 9339 | N | ALA | C | 353 | 8.965 | 83.765 | 42.564 | 1.00 | 20.72 | N |
| ATOM | 9340 | CA | ALA | C | 353 | 8.421 | 84.807 | 43.422 | 1.00 | 21.21 | C |
| ATOM | 9341 | C | ALA | C | 353 | 9.250 | 84.908 | 44.702 | 1.00 | 22.03 | C |
| ATOM | 9342 | O | ALA | C | 353 | 9.593 | 86.007 | 45.137 | 1.00 | 22.89 | O |
| ATOM | 9343 | CB | ALA | C | 353 | 6.960 | 84.516 | 43.764 | 1.00 | 19.75 | C |
| ATOM | 9344 | N | LEU | C | 354 | 9.581 | 83.759 | 45.293 | 1.00 | 22.31 | N |
| ATOM | 9345 | CA | LEU | C | 354 | 10.345 | 83.722 | 46.541 | 1.00 | 20.96 | C |
| ATOM | 9346 | C | LEU | C | 354 | 11.773 | 84.217 | 46.392 | 1.00 | 21.53 | C |
| ATOM | 9347 | O | LEU | C | 354 | 12.216 | 85.061 | 47.171 | 1.00 | 23.10 | O |
| ATOM | 9348 | CB | LEU | C | 354 | 10.343 | 82.301 | 47.135 | 1.00 | 19.75 | C |
| ATOM | 9349 | CG | LEU | C | 354 | 11.109 | 82.019 | 48.439 | 1.00 | 17.76 | C |
| ATOM | 9350 | CD1 | LEU | C | 354 | 10.528 | 80.774 | 49.111 | 1.00 | 17.61 | C |
| ATOM | 9351 | CD2 | LEU | C | 354 | 12.595 | 81.823 | 48.148 | 1.00 | 15.88 | C |
| ATOM | 9352 | N | ASN | C | 355 | 12.492 | 83.700 | 45.401 | 1.00 | 21.51 | N |
| ATOM | 9353 | CA | ASN | C | 355 | 13.875 | 84.103 | 45.185 | 1.00 | 21.48 | C |
| ATOM | 9354 | C | ASN | C | 355 | 13.987 | 85.564 | 44.775 | 1.00 | 23.50 | C |
| ATOM | 9355 | O | ASN | C | 355 | 14.887 | 86.271 | 45.234 | 1.00 | 23.17 | O |
| ATOM | 9356 | CB | ASN | C | 355 | 14.534 | 83.215 | 44.129 | 1.00 | 22.29 | C |
| ATOM | 9357 | CG | ASN | C | 355 | 15.004 | 81.884 | 44.696 | 1.00 | 23.95 | C |
| ATOM | 9358 | OD1 | ASN | C | 355 | 16.117 | 81.779 | 45.218 | 1.00 | 23.31 | O |
| ATOM | 9359 | ND2 | ASN | C | 355 | 14.154 | 80.864 | 44.606 | 1.00 | 18.68 | N |
| ATOM | 9360 | N | TYR | C | 356 | 13.080 | 86.032 | 43.922 | 1.00 | 23.57 | N |
| ATOM | 9361 | CA | TYR | C | 356 | 13.158 | 87.425 | 43.501 | 1.00 | 24.68 | C |
| ATOM | 9362 | C | TYR | C | 356 | 12.771 | 88.398 | 44.611 | 1.00 | 25.10 | C |
| ATOM | 9363 | O | TYR | C | 356 | 13.479 | 89.369 | 44.875 | 1.00 | 24.85 | O |
| ATOM | 9364 | CB | TYR | C | 356 | 12.270 | 87.710 | 42.289 | 1.00 | 24.10 | C |
| ATOM | 9365 | CG | TYR | C | 356 | 12.332 | 89.169 | 41.919 | 1.00 | 26.13 | C |
| ATOM | 9366 | CD1 | TYR | C | 356 | 13.502 | 89.722 | 41.387 | 1.00 | 25.20 | C |
| ATOM | 9367 | CD2 | TYR | C | 356 | 11.267 | 90.022 | 42.193 | 1.00 | 26.08 | C |
| ATOM | 9368 | CE1 | TYR | C | 356 | 13.608 | 91.087 | 41.147 | 1.00 | 26.67 | C |
| ATOM | 9369 | CE2 | TYR | C | 356 | 11.364 | 91.392 | 41.954 | 1.00 | 26.41 | C |
| ATOM | 9370 | CZ | TYR | C | 356 | 12.538 | 91.915 | 41.435 | 1.00 | 26.85 | C |
| ATOM | 9371 | OH | TYR | C | 356 | 12.647 | 93.274 | 41.231 | 1.00 | 29.93 | O |
| ATOM | 9372 | N | SER | C | 357 | 11.637 | 88.143 | 45.249 | 1.00 | 25.65 | N |
| ATOM | 9373 | CA | SER | C | 357 | 11.167 | 89.007 | 46.313 | 1.00 | 24.97 | C |
| ATOM | 9374 | C | SER | C | 357 | 12.199 | 89.166 | 47.427 | 1.00 | 25.86 | C |
| ATOM | 9375 | O | SER | C | 357 | 12.332 | 90.251 | 47.996 | 1.00 | 27.20 | O |
| ATOM | 9376 | CB | SER | C | 357 | 9.870 | 88.457 | 46.897 | 1.00 | 25.85 | C |
| ATOM | 9377 | OG | SER | C | 357 | 10.077 | 87.171 | 47.455 | 1.00 | 28.11 | O |
| ATOM | 9378 | N | MET | C | 358 | 12.932 | 88.100 | 47.742 | 1.00 | 24.79 | N |
| ATOM | 9379 | CA | MET | C | 358 | 13.920 | 88.182 | 48.815 | 1.00 | 24.19 | C |
| ATOM | 9380 | C | MET | C | 358 | 15.196 | 88.870 | 48.360 | 1.00 | 25.15 | C |
| ATOM | 9381 | O | MET | C | 358 | 15.804 | 89.624 | 49.122 | 1.00 | 24.55 | O |
| ATOM | 9382 | CB | MET | C | 358 | 14.243 | 86.792 | 49.374 | 1.00 | 23.47 | C |
| ATOM | 9383 | CG | MET | C | 358 | 15.206 | 86.803 | 50.568 | 1.00 | 21.83 | C |
| ATOM | 9384 | SD | MET | C | 358 | 14.784 | 87.995 | 51.871 | 1.00 | 24.40 | S |
| ATOM | 9385 | CE | MET | C | 358 | 13.225 | 87.327 | 52.507 | 1.00 | 20.36 | C |
| ATOM | 9386 | N | PHE | C | 359 | 15.612 | 88.612 | 47.124 | 1.00 | 25.21 | N |
| ATOM | 9387 | CA | PHE | C | 359 | 16.805 | 89.265 | 46.618 | 1.00 | 25.60 | C |
| ATOM | 9388 | C | PHE | C | 359 | 16.551 | 90.772 | 46.624 | 1.00 | 26.21 | C |
| ATOM | 9389 | O | PHE | C | 359 | 17.364 | 91.556 | 47.113 | 1.00 | 25.23 | O |
| ATOM | 9390 | CB | PHE | C | 359 | 17.115 | 88.838 | 45.188 | 1.00 | 26.12 | C |
| ATOM | 9391 | CG | PHE | C | 359 | 18.254 | 89.603 | 44.581 | 1.00 | 26.06 | C |
| ATOM | 9392 | CD1 | PHE | C | 359 | 19.572 | 89.229 | 44.831 | 1.00 | 25.08 | C |
| ATOM | 9393 | CD2 | PHE | C | 359 | 18.011 | 90.743 | 43.817 | 1.00 | 25.31 | C |
| ATOM | 9394 | CE1 | PHE | C | 359 | 20.638 | 89.985 | 44.330 | 1.00 | 27.62 | C |
| ATOM | 9395 | CE2 | PHE | C | 359 | 19.069 | 91.508 | 43.311 | 1.00 | 27.54 | C |
| ATOM | 9396 | CZ | PHE | C | 359 | 20.384 | 91.130 | 43.567 | 1.00 | 26.74 | C |
| ATOM | 9397 | N | ASP | C | 360 | 15.405 | 91.160 | 46.078 | 1.00 | 25.96 | N |
| ATOM | 9398 | CA | ASP | C | 360 | 15.031 | 92.560 | 45.998 | 1.00 | 28.11 | C |
| ATOM | 9399 | C | ASP | C | 360 | 15.033 | 93.250 | 47.361 | 1.00 | 27.95 | C |

| ATOM | 9400 | O   | ASP C 360 | 15.579 |  94.340 | 47.510 | 1.00 | 26.77 | O |
| ATOM | 9401 | CB  | ASP C 360 | 13.651 |  92.699 | 45.350 | 1.00 | 28.63 | C |
| ATOM | 9402 | CG  | ASP C 360 | 13.253 |  94.149 | 45.152 | 1.00 | 31.89 | C |
| ATOM | 9403 | OD1 | ASP C 360 | 14.044 |  94.895 | 44.532 | 1.00 | 31.61 | O |
| ATOM | 9404 | OD2 | ASP C 360 | 12.157 |  94.540 | 45.614 | 1.00 | 31.90 | O |
| ATOM | 9405 | N   | LEU C 361 | 14.414 |  92.616 | 48.352 | 1.00 | 27.64 | N |
| ATOM | 9406 | CA  | LEU C 361 | 14.362 |  93.188 | 49.687 | 1.00 | 26.48 | C |
| ATOM | 9407 | C   | LEU C 361 | 15.756 |  93.220 | 50.296 | 1.00 | 26.44 | C |
| ATOM | 9408 | O   | LEU C 361 | 16.190 |  94.242 | 50.820 | 1.00 | 26.57 | O |
| ATOM | 9409 | CB  | LEU C 361 | 13.432 |  92.376 | 50.586 | 1.00 | 26.34 | C |
| ATOM | 9410 | CG  | LEU C 361 | 13.382 |  92.846 | 52.045 | 1.00 | 27.66 | C |
| ATOM | 9411 | CD1 | LEU C 361 | 12.780 |  94.244 | 52.110 | 1.00 | 25.13 | C |
| ATOM | 9412 | CD2 | LEU C 361 | 12.563 |  91.872 | 52.879 | 1.00 | 25.71 | C |
| ATOM | 9413 | N   | ALA C 362 | 16.457 |  92.096 | 50.218 | 1.00 | 26.13 | N |
| ATOM | 9414 | CA  | ALA C 362 | 17.800 |  92.002 | 50.773 | 1.00 | 27.49 | C |
| ATOM | 9415 | C   | ALA C 362 | 18.722 |  93.039 | 50.155 | 1.00 | 27.96 | C |
| ATOM | 9416 | O   | ALA C 362 | 19.463 |  93.716 | 50.862 | 1.00 | 29.42 | O |
| ATOM | 9417 | CB  | ALA C 362 | 18.365 |  90.605 | 50.552 | 1.00 | 26.32 | C |
| ATOM | 9418 | N   | TYR C 363 | 18.681 |  93.158 | 48.833 | 1.00 | 28.83 | N |
| ATOM | 9419 | CA  | TYR C 363 | 19.527 |  94.120 | 48.145 | 1.00 | 27.85 | C |
| ATOM | 9420 | C   | TYR C 363 | 19.252 |  95.514 | 48.689 | 1.00 | 28.68 | C |
| ATOM | 9421 | O   | TYR C 363 | 20.169 |  96.217 | 49.114 | 1.00 | 29.53 | O |
| ATOM | 9422 | CB  | TYR C 363 | 19.252 |  94.105 | 46.644 | 1.00 | 28.64 | C |
| ATOM | 9423 | CG  | TYR C 363 | 20.184 |  95.008 | 45.864 | 1.00 | 30.85 | C |
| ATOM | 9424 | CD1 | TYR C 363 | 21.471 |  94.590 | 45.536 | 1.00 | 29.91 | C |
| ATOM | 9425 | CD2 | TYR C 363 | 19.795 |  96.299 | 45.495 | 1.00 | 31.85 | C |
| ATOM | 9426 | CE1 | TYR C 363 | 22.350 |  95.428 | 44.865 | 1.00 | 32.93 | C |
| ATOM | 9427 | CE2 | TYR C 363 | 20.669 |  97.151 | 44.822 | 1.00 | 33.40 | C |
| ATOM | 9428 | CZ  | TYR C 363 | 21.946 |  96.706 | 44.512 | 1.00 | 34.39 | C |
| ATOM | 9429 | OH  | TYR C 363 | 22.828 |  97.533 | 43.851 | 1.00 | 37.24 | O |
| ATOM | 9430 | N   | GLY C 364 | 17.981 |  95.901 | 48.678 | 1.00 | 28.87 | N |
| ATOM | 9431 | CA  | GLY C 364 | 17.604 |  97.214 | 49.165 | 1.00 | 30.70 | C |
| ATOM | 9432 | C   | GLY C 364 | 17.934 |  97.416 | 50.630 | 1.00 | 32.60 | C |
| ATOM | 9433 | O   | GLY C 364 | 18.315 |  98.511 | 51.041 | 1.00 | 34.94 | O |
| ATOM | 9434 | N   | TYR C 365 | 17.788 |  96.354 | 51.415 | 1.00 | 32.18 | N |
| ATOM | 9435 | CA  | TYR C 365 | 18.057 |  96.394 | 52.848 | 1.00 | 31.23 | C |
| ATOM | 9436 | C   | TYR C 365 | 19.536 |  96.631 | 53.109 | 1.00 | 31.30 | C |
| ATOM | 9437 | O   | TYR C 365 | 19.903 |  97.344 | 54.043 | 1.00 | 32.04 | O |
| ATOM | 9438 | CB  | TYR C 365 | 17.626 |  95.069 | 53.478 | 1.00 | 31.14 | C |
| ATOM | 9439 | CG  | TYR C 365 | 17.859 |  94.936 | 54.969 | 1.00 | 28.86 | C |
| ATOM | 9440 | CD1 | TYR C 365 | 17.171 |  95.736 | 55.879 | 1.00 | 28.65 | C |
| ATOM | 9441 | CD2 | TYR C 365 | 18.705 |  93.944 | 55.472 | 1.00 | 28.81 | C |
| ATOM | 9442 | CE1 | TYR C 365 | 17.311 |  95.544 | 57.252 | 1.00 | 27.22 | C |
| ATOM | 9443 | CE2 | TYR C 365 | 18.851 |  93.742 | 56.844 | 1.00 | 25.89 | C |
| ATOM | 9444 | CZ  | TYR C 365 | 18.147 |  94.542 | 57.727 | 1.00 | 27.85 | C |
| ATOM | 9445 | OH  | TYR C 365 | 18.247 |  94.316 | 59.081 | 1.00 | 26.98 | O |
| ATOM | 9446 | N   | ALA C 366 | 20.379 |  96.024 | 52.279 | 1.00 | 30.99 | N |
| ATOM | 9447 | CA  | ALA C 366 | 21.825 |  96.160 | 52.410 | 1.00 | 31.49 | C |
| ATOM | 9448 | C   | ALA C 366 | 22.295 |  97.575 | 52.064 | 1.00 | 33.84 | C |
| ATOM | 9449 | O   | ALA C 366 | 23.412 |  97.966 | 52.412 | 1.00 | 32.71 | O |
| ATOM | 9450 | CB  | ALA C 366 | 22.526 |  95.145 | 51.511 | 1.00 | 29.09 | C |
| ATOM | 9451 | N   | GLN C 367 | 21.444 |  98.337 | 51.378 | 1.00 | 34.97 | N |
| ATOM | 9452 | CA  | GLN C 367 | 21.792 |  99.697 | 50.984 | 1.00 | 36.65 | C |
| ATOM | 9453 | C   | GLN C 367 | 21.126 | 100.738 | 51.870 | 1.00 | 36.94 | C |
| ATOM | 9454 | O   | GLN C 367 | 21.779 | 101.668 | 52.333 | 1.00 | 38.44 | O |
| ATOM | 9455 | CB  | GLN C 367 | 21.368 |  99.971 | 49.536 | 1.00 | 37.42 | C |
| ATOM | 9456 | CG  | GLN C 367 | 21.704 |  98.881 | 48.532 | 1.00 | 42.45 | C |
| ATOM | 9457 | CD  | GLN C 367 | 23.191 |  98.645 | 48.378 | 1.00 | 44.52 | C |
| ATOM | 9458 | OE1 | GLN C 367 | 23.955 |  99.573 | 48.105 | 1.00 | 46.92 | O |
| ATOM | 9459 | NE2 | GLN C 367 | 23.611 |  97.392 | 48.539 | 1.00 | 47.01 | N |
| ATOM | 9460 | N   | ASN C 368 | 19.824 | 100.576 | 52.100 | 1.00 | 36.62 | N |
| ATOM | 9461 | CA  | ASN C 368 | 19.047 | 101.531 | 52.886 | 1.00 | 35.67 | C |
| ATOM | 9462 | C   | ASN C 368 | 18.386 | 100.973 | 54.140 | 1.00 | 35.43 | C |
| ATOM | 9463 | O   | ASN C 368 | 17.437 | 101.572 | 54.655 | 1.00 | 35.91 | O |
| ATOM | 9464 | CB  | ASN C 368 | 17.962 | 102.137 | 52.000 | 1.00 | 36.78 | C |
| ATOM | 9465 | CG  | ASN C 368 | 18.529 | 102.830 | 50.781 | 1.00 | 39.96 | C |
| ATOM | 9466 | OD1 | ASN C 368 | 17.858 | 102.946 | 49.754 | 1.00 | 41.18 | O |
| ATOM | 9467 | ND2 | ASN C 368 | 19.768 | 103.309 | 50.890 | 1.00 | 39.91 | N |
| ATOM | 9468 | N   | GLN C 369 | 18.879 |  99.836 | 54.627 | 1.00 | 34.33 | N |
| ATOM | 9469 | CA  | GLN C 369 | 18.329 |  99.196 | 55.821 | 1.00 | 31.78 | C |
| ATOM | 9470 | C   | GLN C 369 | 16.804 |  99.290 | 55.952 | 1.00 | 30.97 | C |
| ATOM | 9471 | O   | GLN C 369 | 16.074 |  98.822 | 55.080 | 1.00 | 32.58 | O |
| ATOM | 9472 | CB  | GLN C 369 | 18.994 |  99.755 | 57.083 | 1.00 | 31.14 | C |
| ATOM | 9473 | CG  | GLN C 369 | 20.502 |  99.537 | 57.129 | 1.00 | 32.29 | C |
| ATOM | 9474 | CD  | GLN C 369 | 21.275 | 100.630 | 56.409 | 1.00 | 34.60 | C |
| ATOM | 9475 | OE1 | GLN C 369 | 22.447 | 100.463 | 56.074 | 1.00 | 33.80 | O |
| ATOM | 9476 | NE2 | GLN C 369 | 20.622 | 101.764 | 56.185 | 1.00 | 35.26 | N |
| ATOM | 9477 | N   | MET C 370 | 16.319 |  99.910 | 57.024 | 1.00 | 29.13 | N |
| ATOM | 9478 | CA  | MET C 370 | 14.872 |  99.988 | 57.245 | 1.00 | 30.22 | C |
| ATOM | 9479 | C   | MET C 370 | 14.004 | 100.585 | 56.137 | 1.00 | 30.96 | C |

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ATOM   9480  O    MET C 370    12.860 100.168  55.958  1.00 30.90        O
ATOM   9481  CB   MET C 370    14.570 100.701  58.566  1.00 28.36        C
ATOM   9482  CG   MET C 370    14.968  99.896  59.808  1.00 28.79        C
ATOM   9483  SD   MET C 370    14.585  98.108  59.695  1.00 29.65        S
ATOM   9484  CE   MET C 370    12.800  98.129  59.661  1.00 26.74        C
ATOM   9485  N    SER C 371    14.530 101.559  55.400  1.00 32.48        N
ATOM   9486  CA   SER C 371    13.766 102.177  54.320  1.00 31.80        C
ATOM   9487  C    SER C 371    13.286 101.096  53.354  1.00 30.88        C
ATOM   9488  O    SER C 371    12.119 101.072  52.964  1.00 30.18        O
ATOM   9489  CB   SER C 371    14.629 103.195  53.562  1.00 32.78        C
ATOM   9490  OG   SER C 371    15.101 104.219  54.423  1.00 35.80        O
ATOM   9491  N    ALA C 372    14.194 100.198  52.983  1.00 31.42        N
ATOM   9492  CA   ALA C 372    13.869  99.113  52.062  1.00 32.06        C
ATOM   9493  C    ALA C 372    12.687  98.282  52.546  1.00 32.02        C
ATOM   9494  O    ALA C 372    11.784  97.967  51.770  1.00 33.74        O
ATOM   9495  CB   ALA C 372    15.078  98.224  51.868  1.00 32.56        C
ATOM   9496  N    TYR C 373    12.683  97.935  53.830  1.00 31.49        N
ATOM   9497  CA   TYR C 373    11.598  97.125  54.371  1.00 30.23        C
ATOM   9498  C    TYR C 373    10.279  97.884  54.445  1.00 29.90        C
ATOM   9499  O    TYR C 373     9.214  97.325  54.178  1.00 30.67        O
ATOM   9500  CB   TYR C 373    11.946  96.594  55.766  1.00 28.73        C
ATOM   9501  CG   TYR C 373    10.916  95.602  56.237  1.00 28.99        C
ATOM   9502  CD1  TYR C 373    10.882  94.311  55.710  1.00 27.33        C
ATOM   9503  CD2  TYR C 373     9.890  95.991  57.099  1.00 28.06        C
ATOM   9504  CE1  TYR C 373     9.849  93.437  56.015  1.00 26.83        C
ATOM   9505  CE2  TYR C 373     8.847  95.124  57.409  1.00 27.48        C
ATOM   9506  CZ   TYR C 373     8.833  93.850  56.858  1.00 28.22        C
ATOM   9507  OH   TYR C 373     7.782  93.003  57.116  1.00 30.13        O
ATOM   9508  N    VAL C 374    10.351  99.157  54.815  1.00 31.25        N
ATOM   9509  CA   VAL C 374     9.160  99.986  54.923  1.00 29.72        C
ATOM   9510  C    VAL C 374     8.418 100.019  53.592  1.00 30.26        C
ATOM   9511  O    VAL C 374     7.185 100.040  53.557  1.00 31.17        O
ATOM   9512  CB   VAL C 374     9.534 101.412  55.360  1.00 30.61        C
ATOM   9513  CG1  VAL C 374     8.286 102.272  55.476  1.00 30.57        C
ATOM   9514  CG2  VAL C 374    10.259 101.354  56.696  1.00 30.18        C
ATOM   9515  N    GLU C 375     9.165 100.008  52.493  1.00 30.63        N
ATOM   9516  CA   GLU C 375     8.547 100.013  51.171  1.00 31.62        C
ATOM   9517  C    GLU C 375     7.678  98.780  50.996  1.00 30.44        C
ATOM   9518  O    GLU C 375     6.562  98.864  50.482  1.00 29.87        O
ATOM   9519  CB   GLU C 375     9.610 100.045  50.074  1.00 34.24        C
ATOM   9520  CG   GLU C 375    10.205 101.414  49.838  1.00 37.48        C
ATOM   9521  CD   GLU C 375    11.247 101.406  48.742  1.00 42.06        C
ATOM   9522  OE1  GLU C 375    10.987 100.800  47.678  1.00 45.56        O
ATOM   9523  OE2  GLU C 375    12.322 102.014  48.938  1.00 44.00        O
ATOM   9524  N    LEU C 376     8.189  97.630  51.432  1.00 31.25        N
ATOM   9525  CA   LEU C 376     7.432  96.384  51.322  1.00 29.11        C
ATOM   9526  C    LEU C 376     6.152  96.463  52.151  1.00 29.20        C
ATOM   9527  O    LEU C 376     5.055  96.205  51.648  1.00 29.98        O
ATOM   9528  CB   LEU C 376     8.280  95.196  51.788  1.00 27.21        C
ATOM   9529  CG   LEU C 376     7.582  93.830  51.883  1.00 27.40        C
ATOM   9530  CD1  LEU C 376     6.928  93.472  50.557  1.00 24.13        C
ATOM   9531  CD2  LEU C 376     8.600  92.770  52.280  1.00 25.08        C
ATOM   9532  N    GLN C 377     6.291  96.840  53.418  1.00 29.51        N
ATOM   9533  CA   GLN C 377     5.135  96.935  54.303  1.00 29.82        C
ATOM   9534  C    GLN C 377     4.043  97.816  53.708  1.00 30.28        C
ATOM   9535  O    GLN C 377     2.861  97.459  53.733  1.00 30.64        O
ATOM   9536  CB   GLN C 377     5.553  97.485  55.669  1.00 31.05        C
ATOM   9537  CG   GLN C 377     4.511  97.276  56.750  1.00 31.13        C
ATOM   9538  CD   GLN C 377     4.937  97.836  58.090  1.00 33.59        C
ATOM   9539  OE1  GLN C 377     4.525  97.340  59.139  1.00 36.65        O
ATOM   9540  NE2  GLN C 377     5.755  98.883  58.066  1.00 34.66        N
ATOM   9541  N    GLU C 378     4.437  98.968  53.173  1.00 30.37        N
ATOM   9542  CA   GLU C 378     3.476  99.883  52.573  1.00 31.00        C
ATOM   9543  C    GLU C 378     2.761  99.213  51.407  1.00 30.10        C
ATOM   9544  O    GLU C 378     1.546  99.356  51.251  1.00 30.17        O
ATOM   9545  CB   GLU C 378     4.177 101.162  52.114  1.00 34.38        C
ATOM   9546  CG   GLU C 378     4.619 102.061  53.272  1.00 39.43        C
ATOM   9547  CD   GLU C 378     3.452 102.505  54.150  1.00 42.02        C
ATOM   9548  OE1  GLU C 378     2.448 103.011  53.595  1.00 43.67        O
ATOM   9549  OE2  GLU C 378     3.540 102.356  55.393  1.00 44.15        O
ATOM   9550  N    ARG C 379     3.510  98.483  50.585  1.00 30.61        N
ATOM   9551  CA   ARG C 379     2.904  97.773  49.464  1.00 30.28        C
ATOM   9552  C    ARG C 379     1.890  96.765  50.009  1.00 30.36        C
ATOM   9553  O    ARG C 379     0.843  96.527  49.401  1.00 30.69        O
ATOM   9554  CB   ARG C 379     3.969  97.047  48.643  1.00 31.53        C
ATOM   9555  CG   ARG C 379     4.948  97.976  47.945  1.00 34.73        C
ATOM   9556  CD   ARG C 379     5.517  97.327  46.699  1.00 35.56        C
ATOM   9557  NE   ARG C 379     6.438  96.243  47.018  1.00 40.39        N
ATOM   9558  CZ   ARG C 379     7.717  96.423  47.330  1.00 41.93        C
ATOM   9559  NH1  ARG C 379     8.227  97.648  47.359  1.00 42.75        N
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ATOM   9560  NH2 ARG C 379       8.484  95.379  47.622  1.00 41.66           N
ATOM   9561  N   GLU C 380       2.200  96.181  51.165  1.00 29.01           N
ATOM   9562  CA  GLU C 380       1.300  95.213  51.785  1.00 28.64           C
ATOM   9563  C   GLU C 380       0.004  95.871  52.242  1.00 28.48           C
ATOM   9564  O   GLU C 380      -1.081  95.345  52.002  1.00 26.64           O
ATOM   9565  CB  GLU C 380       1.982  94.530  52.977  1.00 29.83           C
ATOM   9566  CG  GLU C 380       3.016  93.480  52.587  1.00 29.18           C
ATOM   9567  CD  GLU C 380       3.632  92.795  53.792  1.00 31.16           C
ATOM   9568  OE1 GLU C 380       4.454  93.433  54.480  1.00 33.40           O
ATOM   9569  OE2 GLU C 380       3.287  91.625  54.058  1.00 30.35           O
ATOM   9570  N   PHE C 381       0.124  97.010  52.922  1.00 30.10           N
ATOM   9571  CA  PHE C 381      -1.046  97.744  53.394  1.00 30.85           C
ATOM   9572  C   PHE C 381      -1.894  98.095  52.186  1.00 30.50           C
ATOM   9573  O   PHE C 381      -3.116  97.952  52.202  1.00 30.70           O
ATOM   9574  CB  PHE C 381      -0.635  99.044  54.100  1.00 33.07           C
ATOM   9575  CG  PHE C 381      -0.077  98.844  55.481  1.00 33.20           C
ATOM   9576  CD1 PHE C 381      -0.789  98.126  56.434  1.00 33.97           C
ATOM   9577  CD2 PHE C 381       1.146  99.403  55.837  1.00 34.63           C
ATOM   9578  CE1 PHE C 381      -0.294  97.966  57.727  1.00 35.57           C
ATOM   9579  CE2 PHE C 381       1.653  99.250  57.129  1.00 35.75           C
ATOM   9580  CZ  PHE C 381       0.932  98.530  58.075  1.00 35.56           C
ATOM   9581  N   ALA C 382      -1.232  98.555  51.133  1.00 29.34           N
ATOM   9582  CA  ALA C 382      -1.938  98.924  49.922  1.00 32.03           C
ATOM   9583  C   ALA C 382      -2.696  97.713  49.385  1.00 33.37           C
ATOM   9584  O   ALA C 382      -3.880  97.807  49.058  1.00 35.49           O
ATOM   9585  CB  ALA C 382      -0.951  99.441  48.877  1.00 30.76           C
ATOM   9586  N   ALA C 383      -2.020  96.569  49.321  1.00 32.43           N
ATOM   9587  CA  ALA C 383      -2.637  95.352  48.801  1.00 32.11           C
ATOM   9588  C   ALA C 383      -3.888  94.915  49.557  1.00 32.59           C
ATOM   9589  O   ALA C 383      -4.641  94.066  49.078  1.00 31.67           O
ATOM   9590  CB  ALA C 383      -1.617  94.220  48.783  1.00 31.95           C
ATOM   9591  N   GLU C 384      -4.129  95.497  50.727  1.00 34.18           N
ATOM   9592  CA  GLU C 384      -5.304  95.116  51.508  1.00 36.31           C
ATOM   9593  C   GLU C 384      -6.628  95.395  50.800  1.00 37.29           C
ATOM   9594  O   GLU C 384      -7.619  94.699  51.034  1.00 38.37           O
ATOM   9595  CB  GLU C 384      -5.287  95.810  52.869  1.00 37.07           C
ATOM   9596  CG  GLU C 384      -4.006  95.574  53.652  1.00 40.99           C
ATOM   9597  CD  GLU C 384      -4.055  96.165  55.046  1.00 41.46           C
ATOM   9598  OE1 GLU C 384      -4.534  97.308  55.185  1.00 43.96           O
ATOM   9599  OE2 GLU C 384      -3.606  95.496  55.999  1.00 41.88           O
ATOM   9600  N   GLU C 385      -6.660  96.405  49.935  1.00 39.10           N
ATOM   9601  CA  GLU C 385      -7.897  96.710  49.222  1.00 41.05           C
ATOM   9602  C   GLU C 385      -8.177  95.626  48.178  1.00 40.33           C
ATOM   9603  O   GLU C 385      -9.327  95.416  47.783  1.00 41.47           O
ATOM   9604  CB  GLU C 385      -7.822  98.099  48.571  1.00 44.04           C
ATOM   9605  CG  GLU C 385      -6.655  98.294  47.619  1.00 50.63           C
ATOM   9606  CD  GLU C 385      -6.478  99.747  47.197  1.00 54.20           C
ATOM   9607  OE1 GLU C 385      -7.396 100.301  46.544  1.00 57.58           O
ATOM   9608  OE2 GLU C 385      -5.420 100.336  47.523  1.00 55.35           O
ATOM   9609  N   ARG C 386      -7.124  94.931  47.751  1.00 38.85           N
ATOM   9610  CA  ARG C 386      -7.247  93.850  46.773  1.00 36.67           C
ATOM   9611  C   ARG C 386      -7.614  92.536  47.460  1.00 35.72           C
ATOM   9612  O   ARG C 386      -7.899  91.540  46.793  1.00 35.66           O
ATOM   9613  CB  ARG C 386      -5.934  93.649  46.001  1.00 36.90           C
ATOM   9614  CG  ARG C 386      -5.654  94.669  44.912  1.00 36.88           C
ATOM   9615  CD  ARG C 386      -4.449  94.243  44.075  1.00 38.86           C
ATOM   9616  NE  ARG C 386      -3.179  94.390  44.784  1.00 38.58           N
ATOM   9617  CZ  ARG C 386      -2.029  93.849  44.384  1.00 39.89           C
ATOM   9618  NH1 ARG C 386      -1.980  93.115  43.280  1.00 40.53           N
ATOM   9619  NH2 ARG C 386      -0.920  94.049  45.084  1.00 38.94           N
ATOM   9620  N   GLY C 387      -7.587  92.528  48.790  1.00 34.45           N
ATOM   9621  CA  GLY C 387      -7.930  91.318  49.520  1.00 32.88           C
ATOM   9622  C   GLY C 387      -6.821  90.748  50.389  1.00 31.86           C
ATOM   9623  O   GLY C 387      -7.057  89.830  51.178  1.00 32.14           O
ATOM   9624  N   TYR C 388      -5.613  91.285  50.246  1.00 31.42           N
ATOM   9625  CA  TYR C 388      -4.466  90.831  51.029  1.00 30.10           C
ATOM   9626  C   TYR C 388      -4.794  90.925  52.516  1.00 31.21           C
ATOM   9627  O   TYR C 388      -5.491  91.853  52.945  1.00 33.24           O
ATOM   9628  CB  TYR C 388      -3.249  91.699  50.723  1.00 27.80           C
ATOM   9629  CG  TYR C 388      -1.953  91.174  51.297  1.00 27.77           C
ATOM   9630  CD1 TYR C 388      -1.445  89.934  50.903  1.00 26.21           C
ATOM   9631  CD2 TYR C 388      -1.222  91.925  52.215  1.00 26.55           C
ATOM   9632  CE1 TYR C 388      -0.241  89.453  51.405  1.00 23.70           C
ATOM   9633  CE2 TYR C 388      -0.017  91.454  52.729  1.00 27.28           C
ATOM   9634  CZ  TYR C 388       0.468  90.217  52.318  1.00 26.50           C
ATOM   9635  OH  TYR C 388       1.657  89.751  52.824  1.00 23.47           O
ATOM   9636  N   THR C 389      -4.292  89.973  53.299  1.00 29.01           N
ATOM   9637  CA  THR C 389      -4.546  89.965  54.736  1.00 28.75           C
ATOM   9638  C   THR C 389      -3.326  89.654  55.594  1.00 28.77           C
ATOM   9639  O   THR C 389      -3.373  89.824  56.807  1.00 29.93           O
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| ATOM | 9640 | CB | THR | C | 389 | -5.618 | 88.933 | 55.110 | 1.00 | 29.66 | C |
|------|------|------|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 9641 | OG1 | THR | C | 389 | -5.211 | 87.641 | 54.635 | 1.00 | 29.47 | O |
| ATOM | 9642 | CG2 | THR | C | 389 | -6.979 | 89.316 | 54.508 | 1.00 | 29.05 | C |
| ATOM | 9643 | N | ALA | C | 390 | -2.237 | 89.203 | 54.980 | 1.00 | 28.02 | N |
| ATOM | 9644 | CA | ALA | C | 390 | -1.043 | 88.844 | 55.742 | 1.00 | 27.50 | C |
| ATOM | 9645 | C | ALA | C | 390 | -0.330 | 90.011 | 56.428 | 1.00 | 27.48 | C |
| ATOM | 9646 | O | ALA | C | 390 | 0.615 | 89.797 | 57.186 | 1.00 | 26.29 | O |
| ATOM | 9647 | CB | ALA | C | 390 | -0.063 | 88.084 | 54.851 | 1.00 | 25.93 | C |
| ATOM | 9648 | N | THR | C | 391 | -0.772 | 91.239 | 56.165 | 1.00 | 27.64 | N |
| ATOM | 9649 | CA | THR | C | 391 | -0.155 | 92.409 | 56.788 | 1.00 | 27.02 | C |
| ATOM | 9650 | C | THR | C | 391 | -0.239 | 92.223 | 58.300 | 1.00 | 27.04 | C |
| ATOM | 9651 | O | THR | C | 391 | 0.691 | 92.551 | 59.034 | 1.00 | 27.20 | O |
| ATOM | 9652 | CB | THR | C | 391 | -0.888 | 93.708 | 56.413 | 1.00 | 27.85 | C |
| ATOM | 9653 | OG1 | THR | C | 391 | -1.075 | 93.761 | 54.996 | 1.00 | 26.89 | O |
| ATOM | 9654 | CG2 | THR | C | 391 | -0.067 | 94.909 | 56.832 | 1.00 | 28.40 | C |
| ATOM | 9655 | N | LYS | C | 392 | -1.371 | 91.696 | 58.752 | 1.00 | 26.82 | N |
| ATOM | 9656 | CA | LYS | C | 392 | -1.583 | 91.420 | 60.167 | 1.00 | 27.83 | C |
| ATOM | 9657 | C | LYS | C | 392 | -1.239 | 89.940 | 60.304 | 1.00 | 27.13 | C |
| ATOM | 9658 | O | LYS | C | 392 | -2.113 | 89.075 | 60.320 | 1.00 | 25.85 | O |
| ATOM | 9659 | CB | LYS | C | 392 | -3.041 | 91.687 | 60.528 | 1.00 | 30.66 | C |
| ATOM | 9660 | CG | LYS | C | 392 | -3.556 | 92.982 | 59.911 | 1.00 | 34.48 | C |
| ATOM | 9661 | CD | LYS | C | 392 | -4.619 | 93.655 | 60.749 | 1.00 | 38.12 | C |
| ATOM | 9662 | CE | LYS | C | 392 | -5.882 | 92.827 | 60.868 | 1.00 | 39.70 | C |
| ATOM | 9663 | NZ | LYS | C | 392 | -6.862 | 93.506 | 61.772 | 1.00 | 42.69 | N |
| ATOM | 9664 | N | HIS | C | 393 | 0.059 | 89.671 | 60.381 | 1.00 | 26.61 | N |
| ATOM | 9665 | CA | HIS | C | 393 | 0.577 | 88.316 | 60.453 | 1.00 | 26.09 | C |
| ATOM | 9666 | C | HIS | C | 393 | 0.124 | 87.444 | 61.615 | 1.00 | 25.70 | C |
| ATOM | 9667 | O | HIS | C | 393 | 0.047 | 86.222 | 61.471 | 1.00 | 26.19 | O |
| ATOM | 9668 | CB | HIS | C | 393 | 2.107 | 88.350 | 60.408 | 1.00 | 26.55 | C |
| ATOM | 9669 | CG | HIS | C | 393 | 2.722 | 89.322 | 61.367 | 1.00 | 26.62 | C |
| ATOM | 9670 | ND1 | HIS | C | 393 | 3.347 | 90.479 | 60.955 | 1.00 | 27.75 | N |
| ATOM | 9671 | CD2 | HIS | C | 393 | 2.809 | 89.307 | 62.719 | 1.00 | 26.29 | C |
| ATOM | 9672 | CE1 | HIS | C | 393 | 3.793 | 91.135 | 62.012 | 1.00 | 28.50 | C |
| ATOM | 9673 | NE2 | HIS | C | 393 | 3.479 | 90.445 | 63.095 | 1.00 | 27.86 | N |
| ATOM | 9674 | N | GLN | C | 394 | -0.183 | 88.052 | 62.757 | 1.00 | 24.82 | N |
| ATOM | 9675 | CA | GLN | C | 394 | -0.593 | 87.275 | 63.919 | 1.00 | 24.35 | C |
| ATOM | 9676 | C | GLN | C | 394 | -1.866 | 86.491 | 63.644 | 1.00 | 25.87 | C |
| ATOM | 9677 | O | GLN | C | 394 | -1.900 | 85.264 | 63.804 | 1.00 | 26.12 | O |
| ATOM | 9678 | CB | GLN | C | 394 | -0.784 | 88.188 | 65.131 | 1.00 | 23.49 | C |
| ATOM | 9679 | CG | GLN | C | 394 | 0.406 | 89.088 | 65.396 | 1.00 | 24.44 | C |
| ATOM | 9680 | CD | GLN | C | 394 | 1.609 | 88.357 | 65.973 | 1.00 | 26.50 | C |
| ATOM | 9681 | OE1 | GLN | C | 394 | 1.867 | 87.197 | 65.654 | 1.00 | 26.00 | O |
| ATOM | 9682 | NE2 | GLN | C | 394 | 2.365 | 89.049 | 66.817 | 1.00 | 27.40 | N |
| ATOM | 9683 | N | ARG | C | 395 | -2.917 | 87.188 | 63.231 | 1.00 | 25.12 | N |
| ATOM | 9684 | CA | ARG | C | 395 | -4.177 | 86.515 | 62.940 | 1.00 | 24.45 | C |
| ATOM | 9685 | ·C | ARG | C | 395 | -4.030 | 85.632 | 61.708 | 1.00 | 23.62 | C |
| ATOM | 9686 | O | ARG | C | 395 | -4.666 | 84.582 | 61.609 | 1.00 | 24.64 | O |
| ATOM | 9687 | CB | ARG | C | 395 | -5.284 | 87.540 | 62.704 | 1.00 | 24.62 | C |
| ATOM | 9688 | CG | ARG | C | 395 | -4.904 | 88.619 | 61.710 | 1.00 | 25.81 | C |
| ATOM | 9689 | CD | ARG | C | 395 | -6.121 | 89.049 | 60.924 | 1.00 | 26.82 | C |
| ATOM | 9690 | NE | ARG | C | 395 | -6.670 | 87.952 | 60.128 | 1.00 | 26.42 | N |
| ATOM | 9691 | CZ | ARG | C | 395 | -6.060 | 87.407 | 59.077 | 1.00 | 25.62 | C |
| ATOM | 9692 | NH1 | ARG | C | 395 | -4.871 | 87.851 | 58.686 | 1.00 | 21.49 | N |
| ATOM | 9693 | NH2 | ARG | C | 395 | -6.648 | 86.424 | 58.404 | 1.00 | 23.72 | N |
| ATOM | 9694 | N | GLU | C | 396 | -3.189 | 86.070 | 60.773 | 1.00 | 22.23 | N |
| ATOM | 9695 | CA | GLU | C | 396 | -2.941 | 85.339 | 59.531 | 1.00 | 23.69 | C |
| ATOM | 9696 | C | GLU | C | 396 | -2.404 | 83.934 | 59.812 | 1.00 | 25.34 | C |
| ATOM | 9697 | O | GLU | C | 396 | -2.657 | 82.995 | 59.053 | 1.00 | 24.43 | O |
| ATOM | 9698 | CB | GLU | C | 396 | -1.924 | 86.104 | 58.672 | 1.00 | 23.18 | C |
| ATOM | 9699 | CG | GLU | C | 396 | -1.643 | 85.512 | 57.283 | 1.00 | 24.98 | C |
| ATOM | 9700 | CD | GLU | C | 396 | -2.811 | 85.664 | 56.314 | 1.00 | 25.98 | C |
| ATOM | 9701 | OE1 | GLU | C | 396 | -3.625 | 86.597 | 56.503 | 1.00 | 24.50 | O |
| ATOM | 9702 | OE2 | GLU | C | 396 | -2.906 | 84.863 | 55.355 | 1.00 | 24.67 | O |
| ATOM | 9703 | N | VAL | C | 397 | -1.667 | 83.788 | 60.908 | 1.00 | 23.58 | N |
| ATOM | 9704 | CA | VAL | C | 397 | -1.092 | 82.497 | 61.228 | 1.00 | 24.30 | C |
| ATOM | 9705 | C | VAL | C | 397 | -1.891 | 81.734 | 62.292 | 1.00 | 23.55 | C |
| ATOM | 9706 | O | VAL | C | 397 | -1.459 | 80.689 | 62.781 | 1.00 | 22.31 | O |
| ATOM | 9707 | CB | VAL | C | 397 | 0.401 | 82.670 | 61.633 | 1.00 | 24.93 | C |
| ATOM | 9708 | CG1 | VAL | C | 397 | 0.523 | 83.283 | 63.009 | 1.00 | 24.46 | C |
| ATOM | 9709 | CG2 | VAL | C | 397 | 1.103 | 81.352 | 61.566 | 1.00 | 30.76 | C |
| ATOM | 9710 | N | GLY | C | 398 | -3.061 | 82.260 | 62.644 | 1.00 | 22.56 | N |
| ATOM | 9711 | CA | GLY | C | 398 | -3.908 | 81.582 | 63.609 | 1.00 | 22.16 | C |
| ATOM | 9712 | C | GLY | C | 398 | -3.943 | 82.021 | 65.063 | 1.00 | 22.00 | C |
| ATOM | 9713 | O | GLY | C | 398 | -4.597 | 81.366 | 65.873 | 1.00 | 22.90 | O |
| ATOM | 9714 | N | ALA | C | 399 | -3.257 | 83.104 | 65.411 | 1.00 | 22.30 | N |
| ATOM | 9715 | CA | ALA | C | 399 | -3.263 | 83.583 | 66.794 | 1.00 | 22.35 | C |
| ATOM | 9716 | C | ALA | C | 399 | -4.701 | 83.717 | 67.303 | 1.00 | 22.76 | C |
| ATOM | 9717 | O | ALA | C | 399 | -5.019 | 83.309 | 68.426 | 1.00 | 22.97 | O |
| ATOM | 9718 | CB | ALA | C | 399 | -2.544 | 84.927 | 66.891 | 1.00 | 22.00 | C |
| ATOM | 9719 | N | GLY | C | 400 | -5.571 | 84.284 | 66.473 | 1.00 | 21.81 | N |

| ATOM | 9720 | CA | GLY | C | 400 | -6.957 | 84.439 | 66.878 | 1.00 | 21.30 | C |
|------|------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 9721 | C | GLY | C | 400 | -7.623 | 83.090 | 67.068 | 1.00 | 21.98 | C |
| ATOM | 9722 | O | GLY | C | 400 | -8.458 | 82.910 | 67.956 | 1.00 | 22.88 | O |
| ATOM | 9723 | N | TYR | C | 401 | -7.248 | 82.127 | 66.233 | 1.00 | 20.58 | N |
| ATOM | 9724 | CA | TYR | C | 401 | -7.833 | 80.797 | 66.310 | 1.00 | 20.76 | C |
| ATOM | 9725 | C | TYR | C | 401 | -7.453 | 80.078 | 67.604 | 1.00 | 21.16 | C |
| ATOM | 9726 | O | TYR | C | 401 | -8.312 | 79.489 | 68.266 | 1.00 | 21.29 | O |
| ATOM | 9727 | CB | TYR | C | 401 | -7.405 | 79.958 | 65.098 | 1.00 | 20.58 | C |
| ATOM | 9728 | CG | TYR | C | 401 | -8.004 | 78.571 | 65.071 | 1.00 | 20.04 | C |
| ATOM | 9729 | CD1 | TYR | C | 401 | -9.376 | 78.378 | 64.869 | 1.00 | 20.59 | C |
| ATOM | 9730 | CD2 | TYR | C | 401 | -7.205 | 77.447 | 65.255 | 1.00 | 19.16 | C |
| ATOM | 9731 | CE1 | TYR | C | 401 | -9.928 | 77.088 | 64.848 | 1.00 | 18.65 | C |
| ATOM | 9732 | CE2 | TYR | C | 401 | -7.749 | 76.158 | 65.239 | 1.00 | 18.49 | C |
| ATOM | 9733 | CZ | TYR | C | 401 | -9.101 | 75.985 | 65.035 | 1.00 | 15.79 | C |
| ATOM | 9734 | OH | TYR | C | 401 | -9.616 | 74.709 | 65.012 | 1.00 | 17.83 | O |
| ATOM | 9735 | N | PHE | C | 402 | -6.174 | 80.123 | 67.970 | 1.00 | 19.86 | N |
| ATOM | 9736 | CA | PHE | C | 402 | -5.749 | 79.458 | 69.190 | 1.00 | 20.48 | C |
| ATOM | 9737 | C | PHE | C | 402 | -6.252 | 80.178 | 70.438 | 1.00 | 22.57 | C |
| ATOM | 9738 | O | PHE | C | 402 | -6.390 | 79.561 | 71.502 | 1.00 | 21.63 | O |
| ATOM | 9739 | CB | PHE | C | 402 | -4.222 | 79.257 | 69.203 | 1.00 | 20.29 | C |
| ATOM | 9740 | CG | PHE | C | 402 | -3.765 | 78.121 | 68.303 | 1.00 | 18.69 | C |
| ATOM | 9741 | CD1 | PHE | C | 402 | -3.633 | 78.306 | 66.930 | 1.00 | 15.65 | C |
| ATOM | 9742 | CD2 | PHE | C | 402 | -3.584 | 76.838 | 68.819 | 1.00 | 17.28 | C |
| ATOM | 9743 | CE1 | PHE | C | 402 | -3.335 | 77.233 | 66.082 | 1.00 | 17.11 | C |
| ATOM | 9744 | CE2 | PHE | C | 402 | -3.289 | 75.759 | 67.979 | 1.00 | 18.24 | C |
| ATOM | 9745 | CZ | PHE | C | 402 | -3.166 | 75.958 | 66.610 | 1.00 | 15.93 | C |
| ATOM | 9746 | N | ASP | C | 403 | -6.549 | 81.471 | 70.313 | 1.00 | 24.38 | N |
| ATOM | 9747 | CA | ASP | C | 403 | -7.106 | 82.209 | 71.448 | 1.00 | 26.11 | C |
| ATOM | 9748 | C | ASP | C | 403 | -8.501 | 81.645 | 71.700 | 1.00 | 26.54 | C |
| ATOM | 9749 | O | ASP | C | 403 | -8.932 | 81.488 | 72.846 | 1.00 | 27.85 | O |
| ATOM | 9750 | CB | ASP | C | 403 | -7.222 | 83.703 | 71.148 | 1.00 | 29.14 | C |
| ATOM | 9751 | CG | ASP | C | 403 | -5.940 | 84.452 | 71.429 | 1.00 | 32.69 | C |
| ATOM | 9752 | OD1 | ASP | C | 403 | -5.142 | 83.969 | 72.261 | 1.00 | 34.77 | O |
| ATOM | 9753 | OD2 | ASP | C | 403 | -5.735 | 85.531 | 70.835 | 1.00 | 36.64 | O |
| ATOM | 9754 | N | ARG | C | 404 | -9.200 | 81.340 | 70.610 | 1.00 | 26.48 | N |
| ATOM | 9755 | CA | ARG | C | 404 | -10.541 | 80.780 | 70.684 | 1.00 | 26.58 | C |
| ATOM | 9756 | C | ARG | C | 404 | -10.482 | 79.421 | 71.390 | 1.00 | 26.64 | C |
| ATOM | 9757 | O | ARG | C | 404 | -11.312 | 79.121 | 72.254 | 1.00 | 25.39 | O |
| ATOM | 9758 | CB | ARG | C | 404 | -11.114 | 80.629 | 69.273 | 1.00 | 26.90 | C |
| ATOM | 9759 | CG | ARG | C | 404 | -12.576 | 80.243 | 69.233 | 1.00 | 31.93 | C |
| ATOM | 9760 | CD | ARG | C | 404 | -13.414 | 81.230 | 70.019 | 1.00 | 36.50 | C |
| ATOM | 9761 | NE | ARG | C | 404 | -14.817 | 80.833 | 70.063 | 1.00 | 41.33 | N |
| ATOM | 9762 | CZ | ARG | C | 404 | -15.647 | 80.916 | 69.032 | 1.00 | 41.85 | C |
| ATOM | 9763 | NH1 | ARG | C | 404 | -15.215 | 81.389 | 67.871 | 1.00 | 42.66 | N |
| ATOM | 9764 | NH2 | ARG | C | 404 | -16.905 | 80.521 | 69.164 | 1.00 | 44.28 | N |
| ATOM | 9765 | N | ILE | C | 405 | -9.500 | 78.601 | 71.012 | 1.00 | 25.42 | N |
| ATOM | 9766 | CA | ILE | C | 405 | -9.318 | 77.286 | 71.627 | 1.00 | 23.41 | C |
| ATOM | 9767 | C | ILE | C | 405 | -9.031 | 77.500 | 73.113 | 1.00 | 22.98 | C |
| ATOM | 9768 | O | ILE | C | 405 | -9.621 | 76.848 | 73.975 | 1.00 | 23.67 | O |
| ATOM | 9769 | CB | ILE | C | 405 | -8.117 | 76.515 | 70.996 | 1.00 | 22.40 | C |
| ATOM | 9770 | CG1 | ILE | C | 405 | -8.444 | 76.115 | 69.552 | 1.00 | 21.43 | C |
| ATOM | 9771 | CG2 | ILE | C | 405 | -7.784 | 75.280 | 71.835 | 1.00 | 22.39 | C |
| ATOM | 9772 | CD1 | ILE | C | 405 | -7.345 | 75.328 | 68.856 | 1.00 | 20.19 | C |
| ATOM | 9773 | N | ALA | C | 406 | -8.126 | 78.430 | 73.400 | 1.00 | 22.02 | N |
| ATOM | 9774 | CA | ALA | C | 406 | -7.750 | 78.742 | 74.775 | 1.00 | 22.67 | C |
| ATOM | 9775 | C | ALA | C | 406 | -8.943 | 79.168 | 75.628 | 1.00 | 23.20 | C |
| ATOM | 9776 | O | ALA | C | 406 | -9.088 | 78.712 | 76.768 | 1.00 | 22.91 | O |
| ATOM | 9777 | CB | ALA | C | 406 | -6.686 | 79.834 | 74.789 | 1.00 | 19.99 | C |
| ATOM | 9778 | N | THR | C | 407 | -9.800 | 80.033 | 75.089 | 1.00 | 23.02 | N |
| ATOM | 9779 | CA | THR | C | 407 | -10.953 | 80.491 | 75.858 | 1.00 | 24.51 | C |
| ATOM | 9780 | C | THR | C | 407 | -12.047 | 79.429 | 75.941 | 1.00 | 24.74 | C |
| ATOM | 9781 | O | THR | C | 407 | -12.907 | 79.477 | 76.823 | 1.00 | 26.25 | O |
| ATOM | 9782 | CB | THR | C | 407 | -11.532 | 81.813 | 75.290 | 1.00 | 24.60 | C |
| ATOM | 9783 | OG1 | THR | C | 407 | -11.953 | 81.625 | 73.936 | 1.00 | 27.64 | O |
| ATOM | 9784 | CG2 | THR | C | 407 | -10.480 | 82.906 | 75.338 | 1.00 | 23.91 | C |
| ATOM | 9785 | N | THR | C | 408 | -12.019 | 78.465 | 75.028 | 1.00 | 24.45 | N |
| ATOM | 9786 | CA | THR | C | 408 | -13.005 | 77.391 | 75.059 | 1.00 | 24.02 | C |
| ATOM | 9787 | C | THR | C | 408 | -12.621 | 76.461 | 76.215 | 1.00 | 24.78 | C |
| ATOM | 9788 | O | THR | C | 408 | -13.485 | 75.975 | 76.943 | 1.00 | 24.48 | O |
| ATOM | 9789 | CB | THR | C | 408 | -13.027 | 76.596 | 73.728 | 1.00 | 23.26 | C |
| ATOM | 9790 | OG1 | THR | C | 408 | -13.374 | 77.474 | 72.652 | 1.00 | 25.35 | O |
| ATOM | 9791 | CG2 | THR | C | 408 | -14.042 | 75.476 | 73.787 | 1.00 | 19.79 | C |
| ATOM | 9792 | N | VAL | C | 409 | -11.320 | 76.231 | 76.385 | 1.00 | 24.71 | N |
| ATOM | 9793 | CA | VAL | C | 409 | -10.818 | 75.382 | 77.462 | 1.00 | 26.07 | C |
| ATOM | 9794 | C | VAL | C | 409 | -10.963 | 76.091 | 78.812 | 1.00 | 29.22 | C |
| ATOM | 9795 | O | VAL | C | 409 | -11.324 | 75.466 | 79.809 | 1.00 | 30.59 | O |
| ATOM | 9796 | CB | VAL | C | 409 | -9.323 | 75.012 | 77.238 | 1.00 | 25.80 | C |
| ATOM | 9797 | CG1 | VAL | C | 409 | -8.726 | 74.432 | 78.511 | 1.00 | 24.74 | C |
| ATOM | 9798 | CG2 | VAL | C | 409 | -9.196 | 74.004 | 76.101 | 1.00 | 23.13 | C |
| ATOM | 9799 | N | ASP | C | 410 | -10.674 | 77.392 | 78.838 | 1.00 | 30.76 | N |

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ATOM   9800   CA   ASP C 410   -10.777  78.193  80.058  1.00 33.18        C
ATOM   9801   C    ASP C 410   -11.098  79.647  79.722  1.00 33.93        C
ATOM   9802   O    ASP C 410   -10.214  80.414  79.348  1.00 34.26        O
ATOM   9803   CB   ASP C 410    -9.470  78.131  80.854  1.00 35.31        C
ATOM   9804   CG   ASP C 410    -9.440  79.123  82.011  1.00 37.55        C
ATOM   9805   OD1  ASP C 410   -10.526  79.498  82.506  1.00 40.14        O
ATOM   9806   OD2  ASP C 410    -8.334  79.521  82.435  1.00 38.63        O
ATOM   9807   N    PRO C 411   -12.373  80.044  79.864  1.00 34.93        N
ATOM   9808   CA   PRO C 411   -12.842  81.409  79.575  1.00 36.20        C
ATOM   9809   C    PRO C 411   -12.111  82.505  80.346  1.00 37.92        C
ATOM   9810   O    PRO C 411   -11.953  83.628  79.852  1.00 37.74        O
ATOM   9811   CB   PRO C 411   -14.323  81.358  79.947  1.00 34.96        C
ATOM   9812   CG   PRO C 411   -14.680  79.922  79.736  1.00 36.11        C
ATOM   9813   CD   PRO C 411   -13.490  79.188  80.295  1.00 34.14        C
ATOM   9814   N    ASN C 412   -11.666  82.168  81.555  1.00 38.87        N
ATOM   9815   CA   ASN C 412   -10.972  83.116  82.419  1.00 39.22        C
ATOM   9816   C    ASN C 412    -9.452  83.109  82.248  1.00 39.93        C
ATOM   9817   O    ASN C 412    -8.726  83.659  83.079  1.00 40.22        O
ATOM   9818   CB   ASN C 412   -11.327  82.832  83.882  1.00 40.08        C
ATOM   9819   CG   ASN C 412   -12.823  82.668  84.098  1.00 42.06        C
ATOM   9820   OD1  ASN C 412   -13.619  83.523  83.708  1.00 43.52        O
ATOM   9821   ND2  ASN C 412   -13.212  81.563  84.722  1.00 44.00        N
ATOM   9822   N    SER C 413    -8.969  82.489  81.175  1.00 39.35        N
ATOM   9823   CA   SER C 413    -7.533  82.438  80.914  1.00 38.76        C
ATOM   9824   C    SER C 413    -6.946  83.839  80.827  1.00 40.01        C
ATOM   9825   O    SER C 413    -7.445  84.683  80.079  1.00 41.40        O
ATOM   9826   CB   SER C 413    -7.248  81.712  79.602  1.00 36.87        C
ATOM   9827   OG   SER C 413    -5.921  81.967  79.178  1.00 34.20        O
ATOM   9828   N    SER C 414    -5.882  84.082  81.585  1.00 39.75        N
ATOM   9829   CA   SER C 414    -5.236  85.388  81.576  1.00 41.19        C
ATOM   9830   C    SER C 414    -4.013  85.408  80.657  1.00 41.78        C
ATOM   9831   O    SER C 414    -3.166  86.300  80.756  1.00 42.24        O
ATOM   9832   CB   SER C 414    -4.829  85.784  83.002  1.00 40.44        C
ATOM   9833   OG   SER C 414    -4.024  84.790  83.614  1.00 41.70        O
ATOM   9834   N    THR C 415    -3.933  84.439  79.747  1.00 41.65        N
ATOM   9835   CA   THR C 415    -2.788  84.356  78.849  1.00 40.38        C
ATOM   9836   C    THR C 415    -3.121  84.277  77.364  1.00 40.72        C
ATOM   9837   O    THR C 415    -2.441  83.575  76.613  1.00 39.68        O
ATOM   9838   CB   THR C 415    -1.900  83.145  79.210  1.00 41.06        C
ATOM   9839   OG1  THR C 415    -2.671  81.939  79.109  1.00 39.28        O
ATOM   9840   CG2  THR C 415    -1.367  83.284  80.632  1.00 40.59        C
ATOM   9841   N    THR C 416    -4.161  84.988  76.937  1.00 40.39        N
ATOM   9842   CA   THR C 416    -4.533  84.996  75.526  1.00 40.09        C
ATOM   9843   C    THR C 416    -3.495  85.833  74.770  1.00 39.65        C
ATOM   9844   O    THR C 416    -2.779  86.623  75.385  1.00 39.82        O
ATOM   9845   CB   THR C 416    -5.954  85.567  75.326  1.00 40.70        C
ATOM   9846   OG1  THR C 416    -6.077  86.820  76.015  1.00 40.55        O
ATOM   9847   CG2  THR C 416    -6.991  84.582  75.859  1.00 39.36        C
ATOM   9848   N    ALA C 417    -3.420  85.667  73.449  1.00 39.57        N
ATOM   9849   CA   ALA C 417    -2.423  86.359  72.621  1.00 39.27        C
ATOM   9850   C    ALA C 417    -2.765  87.701  71.959  1.00 40.24        C
ATOM   9851   O    ALA C 417    -1.998  88.660  72.075  1.00 39.78        O
ATOM   9852   CB   ALA C 417    -1.909  85.395  71.548  1.00 38.49        C
ATOM   9853   N    LEU C 418    -3.884  87.774  71.244  1.00 40.30        N
ATOM   9854   CA   LEU C 418    -4.244  89.019  70.563  1.00 41.18        C
ATOM   9855   C    LEU C 418    -4.505  90.234  71.462  1.00 41.78        C
ATOM   9856   O    LEU C 418    -4.102  91.352  71.128  1.00 40.97        O
ATOM   9857   CB   LEU C 418    -5.447  88.795  69.639  1.00 40.34        C
ATOM   9858   CG   LEU C 418    -5.167  87.928  68.409  1.00 41.76        C
ATOM   9859   CD1  LEU C 418    -6.406  87.898  67.525  1.00 42.65        C
ATOM   9860   CD2  LEU C 418    -3.975  88.483  67.634  1.00 40.19        C
ATOM   9861   N    THR C 419    -5.176  90.026  72.592  1.00 42.16        N
ATOM   9862   CA   THR C 419    -5.461  91.129  73.504  1.00 41.82        C
ATOM   9863   C    THR C 419    -4.166  91.719  74.063  1.00 42.64        C
ATOM   9864   O    THR C 419    -3.412  91.042  74.766  1.00 43.09        O
ATOM   9865   CB   THR C 419    -6.355  90.672  74.676  1.00 41.73        C
ATOM   9866   OG1  THR C 419    -7.606  90.196  74.161  1.00 40.20        O
ATOM   9867   CG2  THR C 419    -6.619  91.834  75.633  1.00 40.36        C
ATOM   9868   N    GLY C 420    -3.913  92.985  73.741  1.00 42.29        N
ATOM   9869   CA   GLY C 420    -2.709  93.644  74.212  1.00 42.20        C
ATOM   9870   C    GLY C 420    -1.535  93.488  73.258  1.00 43.02        C
ATOM   9871   O    GLY C 420    -0.390  93.794  73.612  1.00 41.86        O
ATOM   9872   N    SER C 421    -1.815  93.009  72.047  1.00 42.12        N
ATOM   9873   CA   SER C 421    -0.777  92.813  71.036  1.00 41.96        C
ATOM   9874   C    SER C 421    -0.605  94.088  70.216  1.00 41.38        C
ATOM   9875   O    SER C 421    -1.542  94.875  70.083  1.00 41.49        O
ATOM   9876   CB   SER C 421    -1.151  91.652  70.105  1.00 40.37        C
ATOM   9877   OG   SER C 421    -2.290  91.966  69.320  1.00 38.27        O
ATOM   9878   N    THR C 422     0.590  94.289  69.666  1.00 41.46        N
ATOM   9879   CA   THR C 422     0.867  95.472  68.857  1.00 41.63        C
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ATOM   9880  C   THR C 422     0.051  95.468  67.562  1.00 42.53      C
ATOM   9881  O   THR C 422    -0.207  96.523  66.981  1.00 42.76      O
ATOM   9882  CB  THR C 422     2.360  95.573  68.498  1.00 40.55      C
ATOM   9883  OG1 THR C 422     2.737  94.454  67.687  1.00 40.35      O
ATOM   9884  CG2 THR C 422     3.206  95.600  69.767  1.00 40.34      C
ATOM   9885  N   GLU C 423    -0.348  94.281  67.109  1.00 41.76      N
ATOM   9886  CA  GLU C 423    -1.155  94.154  65.897  1.00 41.19      C
ATOM   9887  C   GLU C 423    -2.535  94.748  66.176  1.00 41.91      C
ATOM   9888  O   GLU C 423    -3.110  95.441  65.336  1.00 41.30      O
ATOM   9889  CB  GLU C 423    -1.282  92.677  65.501  1.00 38.67      C
ATOM   9890  CG  GLU C 423    -2.233  92.402  64.343  1.00 34.99      C
ATOM   9891  CD  GLU C 423    -2.044  91.008  63.755  1.00 31.85      C
ATOM   9892  OE1 GLU C 423    -0.945  90.739  63.227  1.00 30.37      O
ATOM   9893  OE2 GLU C 423    -2.984  90.189  63.819  1.00 28.15      O
ATOM   9894  N   GLU C 424    -3.050  94.471  67.372  1.00 42.96      N
ATOM   9895  CA  GLU C 424    -4.352  94.968  67.805  1.00 44.33      C
ATOM   9896  C   GLU C 424    -4.355  96.489  67.983  1.00 44.56      C
ATOM   9897  O   GLU C 424    -5.373  97.146  67.748  1.00 44.36      O
ATOM   9898  CB  GLU C 424    -4.746  94.289  69.121  1.00 45.41      C
ATOM   9899  CG  GLU C 424    -5.905  94.942  69.853  1.00 47.16      C
ATOM   9900  CD  GLU C 424    -6.317  94.170  71.094  1.00 48.77      C
ATOM   9901  OE1 GLU C 424    -6.913  93.081  70.946  1.00 50.41      O
ATOM   9902  OE2 GLU C 424    -6.039  94.644  72.217  1.00 47.70      O
ATOM   9903  N   GLY C 425    -3.213  97.046  68.383  1.00 44.78      N
ATOM   9904  CA  GLY C 425    -3.126  98.481  68.594  1.00 46.01      C
ATOM   9905  C   GLY C 425    -2.301  99.290  67.606  1.00 46.76      C
ATOM   9906  O   GLY C 425    -2.036 100.467  67.850  1.00 47.98      O
ATOM   9907  N   GLN C 426    -1.892  98.685  66.494  1.00 46.46      N
ATOM   9908  CA  GLN C 426    -1.100  99.401  65.496  1.00 45.37      C
ATOM   9909  C   GLN C 426    -1.505  99.064  64.068  1.00 45.95      C
ATOM   9910  O   GLN C 426    -0.922  99.584  63.112  1.00 46.59      O
ATOM   9911  CB  GLN C 426     0.391  99.105  65.673  1.00 43.62      C
ATOM   9912  CG  GLN C 426     1.020  99.745  66.894  1.00 43.31      C
ATOM   9913  CD  GLN C 426     2.517  99.491  66.975  1.00 45.63      C
ATOM   9914  OE1 GLN C 426     3.253  99.720  66.010  1.00 45.41      O
ATOM   9915  NE2 GLN C 426     2.977  99.023  68.132  1.00 45.51      N
ATOM   9916  N   PHE C 427    -2.498  98.192  63.921  1.00 45.89      N
ATOM   9917  CA  PHE C 427    -2.971  97.793  62.599  1.00 45.29      C
ATOM   9918  C   PHE C 427    -4.490  97.892  62.503  1.00 46.20      C
ATOM   9919  O   PHE C 427    -4.969  98.543  51.549  1.00 47.46      O
ATOM   9920  CB  PHE C 427    -2.513  96.362  62.272  1.00 43.13      C
ATOM   9921  CG  PHE C 427    -1.020  96.223  62.085  1.00 42.37      C
ATOM   9922  CD1 PHE C 427    -0.149  96.356  63.167  1.00 41.39      C
ATOM   9923  CD2 PHE C 427    -0.485  95.973  60.822  1.00 41.34      C
ATOM   9924  CE1 PHE C 427     1.234  96.243  62.995  1.00 40.67      C
ATOM   9925  CE2 PHE C 427     0.895  95.859 .60.637  1.00 40.38      C
ATOM   9926  CZ  PHE C 427     1.756  95.995  61.726  1.00 40.48      C
TER    9927      PHE C 427
ATOM   9928  N   ALA D   1    39.651  51.900  68.886  1.00 50.41      N
ATOM   9929  CA  ALA D   1    41.078  52.319  69.018  1.00 50.01      C
ATOM   9930  C   ALA D   1    41.463  53.331  67.938  1.00 49.44      C
ATOM   9931  O   ALA D   1    41.953  52.962  66.869  1.00 49.26      O
ATOM   9932  CB  ALA D   1    41.986  51.096  68.937  1.00 50.12      C
ATOM   9933  N   SER D   2    41.237  54.609  68.230  1.00 48.72      N
ATOM   9934  CA  SER D   2    41.553  55.690  67.300  1.00 47.96      C
ATOM   9935  C   SER D   2    41.632  57.001  68.078  1.00 47.23      C
ATOM   9936  O   SER D   2    40.956  57.167  69.095  1.00 49.58      O
ATOM   9937  CB  SER D   2    40.471  55.785  66.218  1.00 47.82      C
ATOM   9938  OG  SER D   2    40.794  56.767  65.249  1.00 47.62      O
ATOM   9939  N   VAL D   3    42.453  57.933  67.606  1.00 44.67      N
ATOM   9940  CA  VAL D   3    42.604  59.216  68.285  1.00 42.14      C
ATOM   9941  C   VAL D   3    41.696  60.289  67.699  1.00 40.03      C
ATOM   9942  O   VAL D   3    41.624  61.403  68.213  1.00 39.90      O
ATOM   9943  CB  VAL D   3    44.060  59.708  68.207  1.00 42.22      C
ATOM   9944  CG1 VAL D   3    44.960  58.788  69.012  1.00 43.68      C
ATOM   9945  CG2 VAL D   3    44.513  59.744  66.756  1.00 42.95      C
ATOM   9946  N   VAL D   4    41.005  59.953  66.617  1.00 38.36      N
ATOM   9947  CA  VAL D   4    40.109  60.901  65.972  1.00 33.62      C
ATOM   9948  C   VAL D   4    39.026  61.324  66.948  1.00 32.11      C
ATOM   9949  O   VAL D   4    38.366  60.482  67.555  1.00 30.89      O
ATOM   9950  CB  VAL D   4    39.438  60.283  64.733  1.00 32.76      C
ATOM   9951  CG1 VAL D   4    38.539  61.304  64.068  1.00 32.34      C
ATOM   9952  CG2 VAL D   4    40.495  59.798  63.761  1.00 33.35      C
ATOM   9953  N   GLY D   5    38.857  62.633  67.104  1.00 30.34      N
ATOM   9954  CA  GLY D   5    37.841  63.146  68.000  1.00 29.56      C
ATOM   9955  C   GLY D   5    38.148  63.026  69.479  1.00 29.57      C
ATOM   9956  O   GLY D   5    37.242  63.134  70.303  1.00 29.19      O
ATOM   9957  N   THR D   6    39.412  62.801  69.827  1.00 29.35      N
ATOM   9958  CA  THR D   6    39.787  62.690  71.232  1.00 29.17      C
ATOM   9959  C   THR D   6    39.483  64.009  71.938  1.00 27.82      C
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| ATOM | 9960 | O | THR | D | 6 | 39.846 | 65.080 | 71.457 | 1.00 25.77 | O |
| ATOM | 9961 | CB | THR | D | 6 | 41.283 | 62.377 | 71.403 | 1.00 32.17 | C |
| ATOM | 9962 | OG1 | THR | D | 6 | 41.569 | 61.072 | 70.875 | 1.00 34.94 | O |
| ATOM | 9963 | CG2 | THR | D | 6 | 41.654 | 62.418 | 72.878 | 1.00 31.64 | C |
| ATOM | 9964 | N | PRO | D | 7 | 38.812 | 63.947 | 73.095 | 1.00 28.38 | N |
| ATOM | 9965 | CA | PRO | D | 7 | 38.470 | 65.165 | 73.839 | 1.00 29.16 | C |
| ATOM | 9966 | C | PRO | D | 7 | 39.693 | 65.917 | 74.354 | 1.00 28.62 | C |
| ATOM | 9967 | O | PRO | D | 7 | 40.728 | 65.315 | 74.628 | 1.00 28.63 | O |
| ATOM | 9968 | CB | PRO | D | 7 | 37.614 | 64.643 | 74.996 | 1.00 27.15 | C |
| ATOM | 9969 | CG | PRO | D | 7 | 37.091 | 63.329 | 74.493 | 1.00 29.67 | C |
| ATOM | 9970 | CD | PRO | D | 7 | 38.278 | 62.756 | 73.773 | 1.00 27.52 | C |
| ATOM | 9971 | N | LYS | D | 8 | 39.562 | 67.234 | 74.476 | 1.00 28.90 | N |
| ATOM | 9972 | CA | LYS | D | 8 | 40.635 | 68.063 | 75.010 | 1.00 28.80 | C |
| ATOM | 9973 | C | LYS | D | 8 | 40.672 | 67.821 | 76.514 | 1.00 28.38 | C |
| ATOM | 9974 | O | LYS | D | 8 | 39.673 | 67.406 | 77.106 | 1.00 27.70 | O |
| ATOM | 9975 | CB | LYS | D | 8 | 40.355 | 69.545 | 74.769 | 1.00 27.62 | C |
| ATOM | 9976 | CG | LYS | D | 8 | 40.334 | 69.960 | 73.321 | 1.00 28.91 | C |
| ATOM | 9977 | CD | LYS | D | 8 | 40.053 | 71.449 | 73.206 | 1.00 30.54 | C |
| ATOM | 9978 | CE | LYS | D | 8 | 39.922 | 71.862 | 71.753 | 1.00 29.46 | C |
| ATOM | 9979 | NZ | LYS | D | 8 | 39.495 | 73.274 | 71.636 | 1.00 31.75 | N |
| ATOM | 9980 | N | SER | D | 9 | 41.819 | 68.084 | 77.129 | 1.00 28.31 | N |
| ATOM | 9981 | CA | SER | D | 9 | 41.963 | 67.911 | 78.567 | 1.00 28.26 | C |
| ATOM | 9982 | C | SER | D | 9 | 41.343 | 69.130 | 79.240 | 1.00 27.07 | C |
| ATOM | 9983 | O | SER | D | 9 | 41.144 | 70.162 | 78.599 | 1.00 27.64 | O |
| ATOM | 9984 | CB | SER | D | 9 | 43.446 | 67.802 | 78.946 | 1.00 29.99 | C |
| ATOM | 9985 | OG | SER | D | 9 | 44.129 | 69.024 | 78.712 | 1.00 28.57 | O |
| ATOM | 9986 | N | ALA | D | 10 | 41.033 | 69.013 | 80.524 | 1.00 28.10 | N |
| ATOM | 9987 | CA | ALA | D | 10 | 40.444 | 70.127 | 81.258 | 1.00 29.58 | C |
| ATOM | 9988 | C | ALA | D | 10 | 41.417 | 71.302 | 81.270 | 1.00 30.54 | C |
| ATOM | 9989 | O | ALA | D | 10 | 41.011 | 72.464 | 81.170 | 1.00 30.58 | O |
| ATOM | 9990 | CB | ALA | D | 10 | 40.118 | 69.702 | 82.683 | 1.00 29.50 | C |
| ATOM | 9991 | N | GLU | D | 11 | 42.705 | 70.990 | 81.385 | 1.00 32.17 | N |
| ATOM | 9992 | CA | GLU | D | 11 | 43.747 | 72.012 | 81.411 | 1.00 33.49 | C |
| ATOM | 9993 | C | GLU | D | 11 | 43.725 | 72.841 | 80.133 | 1.00 33.05 | C |
| ATOM | 9994 | O | GLU | D | 11 | 43.794 | 74.071 | 80.184 | 1.00 31.56 | O |
| ATOM | 9995 | CB | GLU | D | 11 | 45.127 | 71.368 | 81.576 | 1.00 36.81 | C |
| ATOM | 9996 | CG | GLU | D | 11 | 45.350 | 70.638 | 82.897 | 1.00 41.24 | C |
| ATOM | 9997 | CD | GLU | D | 11 | 44.394 | 69.471 | 83.111 | 1.00 45.37 | C |
| ATOM | 9998 | OE1 | GLU | D | 11 | 44.229 | 68.644 | 82.186 | 1.00 45.86 | O |
| ATOM | 9999 | OE2 | GLU | D | 11 | 43.812 | 69.377 | 84.215 | 1.00 47.91 | O |
| ATOM | 10000 | N | GLN | D | 12 | 43.640 | 72.165 | 78.988 | 1.00 32.94 | N |
| ATOM | 10001 | CA | GLN | D | 12 | 43.597 | 72.852 | 77.699 | 1.00 33.82 | C |
| ATOM | 10002 | C | GLN | D | 12 | 42.384 | 73.769 | 77.646 | 1.00 32.99 | C |
| ATOM | 10003 | O | GLN | D | 12 | 42.471 | 74.909 | 77.189 | 1.00 32.85 | O |
| ATOM | 10004 | CB | GLN | D | 12 | 43.498 | 71.849 | 76.554 | 1.00 35.59 | C |
| ATOM | 10005 | CG | GLN | D | 12 | 44.673 | 70.915 | 76.428 | 1.00 38.69 | C |
| ATOM | 10006 | CD | GLN | D | 12 | 44.457 | 69.880 | 75.338 | 1.00 42.60 | C |
| ATOM | 10007 | OE1 | GLN | D | 12 | 44.252 | 70.224 | 74.165 | 1.00 42.07 | O |
| ATOM | 10008 | NE2 | GLN | D | 12 | 44.493 | 68.604 | 75.719 | 1.00 41.84 | N |
| ATOM | 10009 | N | ILE | D | 13 | 41.249 | 73.254 | 78.109 | 1.00 32.92 | N |
| ATOM | 10010 | CA | ILE | D | 13 | 40.009 | 74.022 | 78.123 | 1.00 32.46 | C |
| ATOM | 10011 | C | ILE | D | 13 | 40.168 | 75.257 | 78.995 | 1.00 32.52 | C |
| ATOM | 10012 | O | ILE | D | 13 | 39.860 | 76.373 | 78.572 | 1.00 31.66 | O |
| ATOM | 10013 | CB | ILE | D | 13 | 38.832 | 73.172 | 78.662 | 1.00 31.44 | C |
| ATOM | 10014 | CG1 | ILE | D | 13 | 38.513 | 72.048 | 77.670 | 1.00 30.32 | C |
| ATOM | 10015 | CG2 | ILE | D | 13 | 37.607 | 74.057 | 78.905 | 1.00 29.49 | C |
| ATOM | 10016 | CD1 | ILE | D | 13 | 37.378 | 71.158 | 78.105 | 1.00 29.70 | C |
| ATOM | 10017 | N | GLN | D | 14 | 40.657 | 75.042 | 80.212 | 1.00 33.67 | N |
| ATOM | 10018 | CA | GLN | D | 14 | 40.861 | 76.119 | 81.173 | 1.00 35.03 | C |
| ATOM | 10019 | C | GLN | D | 14 | 41.758 | 77.209 | 80.604 | 1.00 36.08 | C |
| ATOM | 10020 | O | GLN | D | 14 | 41.478 | 78.398 | 80.763 | 1.00 35.76 | O |
| ATOM | 10021 | CB | GLN | D | 14 | 41.472 | 75.568 | 82.461 | 1.00 34.60 | C |
| ATOM | 10022 | CG | GLN | D | 14 | 41.507 | 76.567 | 83.597 | 1.00 35.53 | C |
| ATOM | 10023 | CD | GLN | D | 14 | 40.124 | 77.042 | 83.980 | 1.00 36.87 | C |
| ATOM | 10024 | OE1 | GLN | D | 14 | 39.261 | 76.241 | 84.336 | 1.00 37.58 | O |
| ATOM | 10025 | NE2 | GLN | D | 14 | 39.902 | 78.352 | 83.906 | 1.00 36.32 | N |
| ATOM | 10026 | N | GLN | D | 15 | 42.840 | 76.808 | 79.942 | 1.00 37.45 | N |
| ATOM | 10027 | CA | GLN | D | 15 | 43.746 | 77.783 | 79.351 | 1.00 39.25 | C |
| ATOM | 10028 | C | GLN | D | 15 | 42.983 | 78.678 | 78.387 | 1.00 39.18 | C |
| ATOM | 10029 | O | GLN | D | 15 | 43.059 | 79.901 | 78.478 | 1.00 40.29 | O |
| ATOM | 10030 | CB | GLN | D | 15 | 44.889 | 77.086 | 78.612 | 1.00 41.87 | C |
| ATOM | 10031 | CG | GLN | D | 15 | 45.695 | 78.024 | 77.718 | 1.00 46.27 | C |
| ATOM | 10032 | CD | GLN | D | 15 | 46.908 | 77.354 | 77.101 | 1.00 50.02 | C |
| ATOM | 10033 | OE1 | GLN | D | 15 | 47.892 | 77.072 | 77.786 | 1.00 52.31 | O |
| ATOM | 10034 | NE2 | GLN | D | 15 | 46.839 | 77.086 | 75.800 | 1.00 52.25 | N |
| ATOM | 10035 | N | GLU | D | 16 | 42.249 | 78.064 | 77.463 | 1.00 39.00 | N |
| ATOM | 10036 | CA | GLU | D | 16 | 41.468 | 78.819 | 76.492 | 1.00 39.65 | C |
| ATOM | 10037 | C | GLU | D | 16 | 40.594 | 79.845 | 77.202 | 1.00 38.77 | C |
| ATOM | 10038 | O | GLU | D | 16 | 40.599 | 81.025 | 76.851 | 1.00 39.01 | O |
| ATOM | 10039 | CB | GLU | D | 16 | 40.588 | 77.878 | 75.666 | 1.00 41.31 | C |

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ATOM   10040  CG   GLU D  16      41.350  77.036  74.662  1.00 45.73           C
ATOM   10041  CD   GLU D  16      40.471  75.993  73.993  1.00 48.67           C
ATOM   10042  OE1  GLU D  16      39.375  76.360  73.511  1.00 50.75           O
ATOM   10043  OE2  GLU D  16      40.878  74.809  73.944  1.00 50.01           O
ATOM   10044  N    TRP D  17      39.849  79.397  78.206  1.00 36.88           N
ATOM   10045  CA   TRP D  17      38.981  80.302  78.945  1.00 36.18           C
ATOM   10046  C    TRP D  17      39.773  81.465  79.555  1.00 36.42           C
ATOM   10047  O    TRP D  17      39.299  82.601  79.583  1.00 35.78           O
ATOM   10048  CB   TRP D  17      38.225  79.538  80.045  1.00 33.52           C
ATOM   10049  CG   TRP D  17      37.185  78.562  79.521  1.00 33.43           C
ATOM   10050  CD1  TRP D  17      36.801  78.390  78.219  1.00 32.81           C
ATOM   10051  CD2  TRP D  17      36.406  77.629  80.292  1.00 31.48           C
ATOM   10052  NE1  TRP D  17      35.839  77.410  78.134  1.00 31.29           N
ATOM   10053  CE2  TRP D  17      35.578  76.928  79.389  1.00 29.81           C
ATOM   10054  CE3  TRP D  17      36.329  77.319  81.657  1.00 29.84           C
ATOM   10055  CZ2  TRP D  17      34.684  75.935  79.805  1.00 30.27           C
ATOM   10056  CZ3  TRP D  17      35.439  76.332  82.071  1.00 30.51           C
ATOM   10057  CH2  TRP D  17      34.629  75.652  81.146  1.00 28.90           C
ATOM   10058  N    ASP D  18      40.986  81.185  80.020  1.00 36.98           N
ATOM   10059  CA   ASP D  18      41.810  82.216  80.638  1.00 38.33           C
ATOM   10060  C    ASP D  18      42.538  83.138  79.669  1.00 38.59           C
ATOM   10061  O    ASP D  18      42.729  84.320  79.963  1.00 39.77           O
ATOM   10062  CB   ASP D  18      42.848  81.586  81.574  1.00 37.64           C
ATOM   10063  CG   ASP D  18      42.216  80.813  82.715  1.00 38.26           C
ATOM   10064  OD1  ASP D  18      41.097  81.177  83.142  1.00 39.32           O
ATOM   10065  OD2  ASP D  18      42.849  79.848  83.197  1.00 37.89           O
ATOM   10066  N    THR D  19      42.933  82.614  78.514  1.00 38.79           N
ATOM   10067  CA   THR D  19      43.683  83.417  77.553  1.00 38.23           C
ATOM   10068  C    THR D  19      42.921  83.984  76.352  1.00 38.40           C
ATOM   10069  O    THR D  19      43.173  85.121  75.945  1.00 39.84           O
ATOM   10070  CB   THR D  19      44.902  82.623  77.025  1.00 37.72           C
ATOM   10071  OG1  THR D  19      44.454  81.491  76.274  1.00 40.09           O
ATOM   10072  CG2  THR D  19      45.753  82.127  78.184  1.00 35.61           C
ATOM   10073  N    ASN D  20      41.997  83.215  75.783  1.00 36.26           N
ATOM   10074  CA   ASN D  20      41.256  83.691  74.619  1.00 35.11           C
ATOM   10075  C    ASN D  20      40.341  84.856  74.977  1.00 34.80           C
ATOM   10076  O    ASN D  20      39.512  84.751  75.883  1.00 35.32           O
ATOM   10077  CB   ASN D  20      40.423  82.565  74.010  1.00 35.91           C
ATOM   10078  CG   ASN D  20      39.904  82.913  72.629  1.00 36.68           C
ATOM   10079  OD1  ASN D  20      39.421  84.025  72.396  1.00 35.28           O
ATOM   10080  ND2  ASN D  20      39.994  81.960  71.703  1.00 36.17           N
ATOM   10081  N    PRO D  21      40.478  85.983  74.256  1.00 33.31           N
ATOM   10082  CA   PRO D  21      39.682  87.196  74.470  1.00 32.53           C
ATOM   10083  C    PRO D  21      38.183  86.963  74.271  1.00 32.23           C
ATOM   10084  O    PRO D  21      37.351  87.762  74.717  1.00 30.90           O
ATOM   10085  CB   PRO D  21      40.255  88.173  73.439  1.00 32.10           C
ATOM   10086  CG   PRO D  21      41.652  87.682  73.240  1.00 33.36           C
ATOM   10087  CD   PRO D  21      41.463  86.198  73.183  1.00 32.17           C
ATOM   10088  N    ARG D  22      37.848  85.871  73.593  1.00 30.81           N
ATOM   10089  CA   ARG D  22      36.454  85.526  73.341  1.00 30.19           C
ATOM   10090  C    ARG D  22      35.706  85.337  74.661  1.00 29.92           C
ATOM   10091  O    ARG D  22      34.518  85.651  74.768  1.00 29.41           O
ATOM   10092  CB   ARG D  22      36.379  84.232  72.522  1.00 29.14           C
ATOM   10093  CG   ARG D  22      34.976  83.679  72.352  1.00 29.34           C
ATOM   10094  CD   ARG D  22      34.105  84.597  71.516  1.00 27.46           C
ATOM   10095  NE   ARG D  22      32.755  84.066  71.364  1.00 29.43           N
ATOM   10096  CZ   ARG D  22      31.800  84.146  72.286  1.00 29.93           C
ATOM   10097  NH1  ARG D  22      32.034  84.746  73.445  1.00 29.66           N
ATOM   10098  NH2  ARG D  22      30.607  83.617  72.051  1.00 30.03           N
ATOM   10099  N    TRP D  23      36.419  84.839  75.665  1.00 27.93           N
ATOM   10100  CA   TRP D  23      35.836  84.571  76.970  1.00 28.98           C
ATOM   10101  C    TRP D  23      36.110  85.667  77.995  1.00 30.88           C
ATOM   10102  O    TRP D  23      35.825  85.503  79.184  1.00 28.72           O
ATOM   10103  CB   TRP D  23      36.372  83.238  77.482  1.00 27.49           C
ATOM   10104  CG   TRP D  23      36.234  82.149  76.462  1.00 29.08           C
ATOM   10105  CD1  TRP D  23      37.226  81.349  75.970  1.00 26.92           C
ATOM   10106  CD2  TRP D  23      35.029  81.752  75.792  1.00 28.03           C
ATOM   10107  NE1  TRP D  23      36.715  80.480  75.037  1.00 27.05           N
ATOM   10108  CE2  TRP D  23      35.369  80.706  74.909  1.00 27.81           C
ATOM   10109  CE3  TRP D  23      33.694  82.180  75.855  1.00 28.54           C
ATOM   10110  CZ2  TRP D  23      34.420  80.079  74.092  1.00 26.96           C
ATOM   10111  CZ3  TRP D  23      32.751  81.554  75.043  1.00 26.81           C
ATOM   10112  CH2  TRP D  23      33.121  80.516  74.175  1.00 25.74           C
ATOM   10113  N    LYS D  24      36.660  86.778  77.518  1.00 32.83           N
ATOM   10114  CA   LYS D  24      37.003  87.919  78.355  1.00 33.60           C
ATOM   10115  C    LYS D  24      35.962  88.237  79.423  1.00 34.29           C
ATOM   10116  O    LYS D  24      36.278  88.265  80.615  1.00 33.76           O
ATOM   10117  CB   LYS D  24      37.220  89.151  77.468  1.00 36.01           C
ATOM   10118  CG   LYS D  24      37.658  90.399  78.208  1.00 38.58           C
ATOM   10119  CD   LYS D  24      37.759  91.595  77.262  1.00 42.42           C
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| ATOM | 10120 | CE | LYS D | 24 | 36.411 | 91.910 | 76.623 | 1.00 43.05 | C |
|------|-------|-----|-------|----|--------|--------|--------|------------|---|
| ATOM | 10121 | NZ | LYS D | 24 | 36.448 | 93.126 | 75.769 | 1.00 44.14 | N |
| ATOM | 10122 | N | ASP D | 25 | 34.724 | 88.469 | 78.993 | 1.00 34.64 | N |
| ATOM | 10123 | CA | ASP D | 25 | 33.638 | 88.820 | 79.904 | 1.00 35.25 | C |
| ATOM | 10124 | C | ASP D | 25 | 32.644 | 87.687 | 80.156 | 1.00 34.45 | C |
| ATOM | 10125 | O | ASP D | 25 | 31.520 | 87.931 | 80.596 | 1.00 33.91 | O |
| ATOM | 10126 | CB | ASP D | 25 | 32.868 | 90.027 | 79.349 | 1.00 38.85 | C |
| ATOM | 10127 | CG | ASP D | 25 | 33.768 | 91.213 | 79.050 | 1.00 41.12 | C |
| ATOM | 10128 | OD1 | ASP D | 25 | 34.490 | 91.656 | 79.968 | 1.00 43.50 | O |
| ATOM | 10129 | OD2 | ASP D | 25 | 33.747 | 91.705 | 77.899 | 1.00 41.88 | O |
| ATOM | 10130 | N | VAL D | 26 | 33.050 | 86.453 | 79.892 | 1.00 33.35 | N |
| ATOM | 10131 | CA | VAL D | 26 | 32.147 | 85.322 | 80.074 | 1.00 31.92 | C |
| ATOM | 10132 | C | VAL D | 26 | 32.278 | 84.609 | 81.416 | 1.00 30.97 | C |
| ATOM | 10133 | O | VAL D | 26 | 33.335 | 84.059 | 81.745 | 1.00 30.63 | O |
| ATOM | 10134 | CB | VAL D | 26 | 32.337 | 84.289 | 78.941 | 1.00 30.87 | C |
| ATOM | 10135 | CG1 | VAL D | 26 | 31.338 | 83.148 | 79.095 | 1.00 29.58 | C |
| ATOM | 10136 | CG2 | VAL D | 26 | 32.162 | 84.970 | 77.594 | 1.00 30.54 | C |
| ATOM | 10137 | N | THR D | 27 | 31.195 | 84.621 | 82.189 | 1.00 29.24 | N |
| ATOM | 10138 | CA | THR D | 27 | 31.179 | 83.950 | 83.481 | 1.00 29.78 | C |
| ATOM | 10139 | C | THR D | 27 | 30.595 | 82.541 | 83.350 | 1.00 29.88 | C |
| ATOM | 10140 | O | THR D | 27 | 29.500 | 82.363 | 82.816 | 1.00 31.22 | O |
| ATOM | 10141 | CB | THR D | 27 | 30.341 | 84.732 | 84.516 | 1.00 30.80 | C |
| ATOM | 10142 | OG1 | THR D | 27 | 31.011 | 85.953 | 84.854 | 1.00 32.76 | O |
| ATOM | 10143 | CG2 | THR D | 27 | 30.149 | 83.910 | 85.781 | 1.00 29.72 | C |
| ATOM | 10144 | N | ARG D | 28 | 31.340 | 81.548 | 83.827 | 1.00 28.20 | N |
| ATOM | 10145 | CA | ARG D | 28 | 30.901 | 80.155 | 83.798 | 1.00 27.35 | C |
| ATOM | 10146 | C | ARG D | 28 | 30.826 | 79.666 | 85.237 | 1.00 27.69 | C |
| ATOM | 10147 | O | ARG D | 28 | 31.848 | 79.614 | 85.922 | 1.00 27.96 | O |
| ATOM | 10148 | CB | ARG D | 28 | 31.901 | 79.286 | 83.027 | 1.00 26.37 | C |
| ATOM | 10149 | CG | ARG D | 28 | 31.919 | 79.496 | 81.519 | 1.00 27.22 | C |
| ATOM | 10150 | CD | ARG D | 28 | 32.891 | 78.527 | 80.872 | 1.00 26.52 | C |
| ATOM | 10151 | NE | ARG D | 28 | 32.773 | 78.457 | 79.415 | 1.00 27.71 | N |
| ATOM | 10152 | CZ | ARG D | 28 | 33.297 | 79.332 | 78.558 | 1.00 28.27 | C |
| ATOM | 10153 | NH1 | ARG D | 28 | 33.988 | 80.377 | 78.997 | 1.00 28.67 | N |
| ATOM | 10154 | NH2 | ARG D | 28 | 33.151 | 79.144 | 77.251 | 1.00 26.28 | N |
| ATOM | 10155 | N | THR D | 29 | 29.631 | 79.306 | 85.703 | 1.00 26.76 | N |
| ATOM | 10156 | CA | THR D | 29 | 29.492 | 78.840 | 87.076 | 1.00 27.68 | C |
| ATOM | 10157 | C | THR D | 29 | 29.835 | 77.364 | 87.279 | 1.00 28.28 | C |
| ATOM | 10158 | O | THR D | 29 | 29.621 | 76.819 | 88.357 | 1.00 30.29 | O |
| ATOM | 10159 | CB | THR D | 29 | 28.072 | 79.117 | 87.635 | 1.00 28.65 | C |
| ATOM | 10160 | OG1 | THR D | 29 | 27.088 | 78.549 | 86.765 | 1.00 29.04 | O |
| ATOM | 10161 | CG2 | THR D | 29 | 27.833 | 80.622 | 87.758 | 1.00 26.98 | C |
| ATOM | 10162 | N | TYR D | 30 | 30.360 | 76.720 | 86.241 | 1.00 26.96 | N |
| ATOM | 10163 | CA | TYR D | 30 | 30.776 | 75.317 | 86.322 | 1.00 25.18 | C |
| ATOM | 10164 | C | TYR D | 30 | 32.251 | 75.274 | 85.915 | 1.00 24.25 | C |
| ATOM | 10165 | O | TYR D | 30 | 32.775 | 76.259 | 85.399 | 1.00 23.77 | O |
| ATOM | 10166 | CB | TYR D | 30 | 29.918 | 74.436 | 85.394 | 1.00 23.76 | C |
| ATOM | 10167 | CG | TYR D | 30 | 29.747 | 74.989 | 83.994 | 1.00 22.71 | C |
| ATOM | 10168 | CD1 | TYR D | 30 | 30.757 | 74.860 | 83.038 | 1.00 22.48 | C |
| ATOM | 10169 | CD2 | TYR D | 30 | 28.584 | 75.667 | 83.632 | 1.00 21.06 | C |
| ATOM | 10170 | CE1 | TYR D | 30 | 30.611 | 75.397 | 81.758 | 1.00 22.82 | C |
| ATOM | 10171 | CE2 | TYR D | 30 | 28.426 | 76.205 | 82.353 | 1.00 22.87 | C |
| ATOM | 10172 | CZ | TYR D | 30 | 29.443 | 76.066 | 81.426 | 1.00 21.56 | C |
| ATOM | 10173 | OH | TYR D | 30 | 29.293 | 76.600 | 80.172 | 1.00 22.98 | O |
| ATOM | 10174 | N | SER D | 31 | 32.919 | 74.147 | 86.136 | 1.00 24.51 | N |
| ATOM | 10175 | CA | SER D | 31 | 34.341 | 74.039 | 85.809 | 1.00 25.57 | C |
| ATOM | 10176 | C | SER D | 31 | 34.657 | 73.333 | 84.494 | 1.00 27.09 | C |
| ATOM | 10177 | O | SER D | 31 | 33.793 | 72.689 | 83.891 | 1.00 28.50 | O |
| ATOM | 10178 | CB | SER D | 31 | 35.067 | 73.300 | 86.924 | 1.00 23.91 | C |
| ATOM | 10179 | OG | SER D | 31 | 34.785 | 71.913 | 86.845 | 1.00 24.86 | O |
| ATOM | 10180 | N | ALA D | 32 | 35.914 | 73.445 | 84.068 | 1.00 26.33 | N |
| ATOM | 10181 | CA | ALA D | 32 | 36.373 | 72.805 | 82.843 | 1.00 27.34 | C |
| ATOM | 10182 | C | ALA D | 32 | 36.285 | 71.291 | 83.014 | 1.00 28.46 | C |
| ATOM | 10183 | O | ALA D | 32 | 36.012 | 70.560 | 82.059 | 1.00 28.82 | O |
| ATOM | 10184 | CB | ALA D | 32 | 37.807 | 73.219 | 82.537 | 1.00 26.76 | C |
| ATOM | 10185 | N | GLU D | 33 | 36.523 | 70.823 | 84.236 | 1.00 29.15 | N |
| ATOM | 10186 | CA | GLU D | 33 | 36.443 | 69.397 | 84.531 | 1.00 30.47 | C |
| ATOM | 10187 | C | GLU D | 33 | 35.003 | 68.933 | 84.312 | 1.00 29.66 | C |
| ATOM | 10188 | O | GLU D | 33 | 34.775 | 67.824 | 83.825 | 1.00 29.35 | O |
| ATOM | 10189 | CB | GLU D | 33 | 36.841 | 69.106 | 85.988 | 1.00 34.39 | C |
| ATOM | 10190 | CG | GLU D | 33 | 38.302 | 69.370 | 86.355 | 1.00 40.07 | C |
| ATOM | 10191 | CD | GLU D | 33 | 38.701 | 70.836 | 86.221 | 1.00 45.26 | C |
| ATOM | 10192 | OE1 | GLU D | 33 | 38.034 | 71.710 | 86.823 | 1.00 44.80 | O |
| ATOM | 10193 | OE2 | GLU D | 33 | 39.694 | 71.109 | 85.512 | 1.00 48.42 | O |
| ATOM | 10194 | N | ASP D | 34 | 34.037 | 69.777 | 84.681 | 1.00 27.78 | N |
| ATOM | 10195 | CA | ASP D | 34 | 32.622 | 69.429 | 84.515 | 1.00 27.91 | C |
| ATOM | 10196 | C | ASP D | 34 | 32.288 | 69.182 | 83.052 | 1.00 26.25 | C |
| ATOM | 10197 | O | ASP D | 34 | 31.516 | 68.277 | 82.729 | 1.00 26.83 | O |
| ATOM | 10198 | CB | ASP D | 34 | 31.701 | 70.541 | 85.039 | 1.00 28.01 | C |
| ATOM | 10199 | CG | ASP D | 34 | 31.732 | 70.672 | 86.548 | 1.00 28.93 | C |

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ATOM   10200  OD1 ASP D   34      31.854  69.637  87.237  1.00 30.54           O
ATOM   10201  OD2 ASP D   34      31.613  71.810  87.045  1.00 30.21           O
ATOM   10202  N   VAL D   35      32.872  69.998  82.177  1.00 23.93           N
ATOM   10203  CA  VAL D   35      32.645  69.889  80.744  1.00 21.08           C
ATOM   10204  C   VAL D   35      33.228  68.583  80.233  1.00 22.71           C
ATOM   10205  O   VAL D   35      32.554  67.824  79.528  1.00 23.78           O
ATOM   10206  CB  VAL D   35      33.289  71.066  79.987  1.00 18.21           C
ATOM   10207  CG1 VAL D   35      33.105  70.888  78.485  1.00 19.91           C
ATOM   10208  CG2 VAL D   35      32.658  72.369  80.430  1.00 15.06           C
ATOM   10209  N   VAL D   36      34.476  68.318  80.602  1.00 21.37           N
ATOM   10210  CA  VAL D   36      35.152  67.096  80.189  1.00 20.07           C
ATOM   10211  C   VAL D   36      34.391  65.849  80.645  1.00 20.70           C
ATOM   10212  O   VAL D   36      34.270  64.883  79.895  1.00 21.47           O
ATOM   10213  CB  VAL D   36      36.599  67.055  80.744  1.00 20.73           C
ATOM   10214  CG1 VAL D   36      37.207  65.673  80.548  1.00 15.72           C
ATOM   10215  CG2 VAL D   36      37.448  68.108  80.034  1.00 18.81           C
ATOM   10216  N   ALA D   37      33.873  65.871  81.868  1.00 19.80           N
ATOM   10217  CA  ALA D   37      33.127  64.730  82.396  1.00 21.80           C
ATOM   10218  C   ALA D   37      31.896  64.378  81.551  1.00 22.69           C
ATOM   10219  O   ALA D   37      31.417  63.247  81.598  1.00 23.23           O
ATOM   10220  CB  ALA D   37      32.696  65.005  83.847  1.00 21.35           C
ATOM   10221  N   LEU D   38      31.393  65.342  80.781  1.00 22.72           N
ATOM   10222  CA  LEU D   38      30.211  65.128  79.947  1.00 22.55           C
ATOM   10223  C   LEU D   38      30.481  64.821  78.470  1.00 22.34           C
ATOM   10224  O   LEU D   38      29.550  64.540  77.720  1.00 22.15           O
ATOM   10225  CB  LEU D   38      29.295  66.356  80.029  1.00 19.42           C
ATOM   10226  CG  LEU D   38      28.682  66.692  81.392  1.00 20.55           C
ATOM   10227  CD1 LEU D   38      28.076  68.086  81.380  1.00 17.65           C
ATOM   10228  CD2 LEU D   38      27.639  65.658  81.736  1.00 20.61           C
ATOM   10229  N   GLN D   39      31.740  64.861  78.050  1.00 22.18           N
ATOM   10230  CA  GLN D   39      32.063  64.625  76.645  1.00 22.61           C
ATOM   10231  C   GLN D   39      32.319  63.183  76.233  1.00 22.42           C
ATOM   10232  O   GLN D   39      32.616  62.920  75.072  1.00 21.99           O
ATOM   10233  CB  GLN D   39      33.272  65.469  76.242  1.00 23.65           C
ATOM   10234  CG  GLN D   39      33.086  66.958  76.446  1.00 25.52           C
ATOM   10235  CD  GLN D   39      34.330  67.742  76.082  1.00 28.02           C
ATOM   10236  OE1 GLN D   39      35.424  67.444  76.565  1.00 29.88           O
ATOM   10237  NE2 GLN D   39      34.171  68.754  75.228  1.00 28.01           N
ATOM   10238  N   GLY D   40      32.196  62.243  77.161  1.00 23.49           N
ATOM   10239  CA  GLY D   40      32.457  60.861  76.799  1.00 25.55           C
ATOM   10240  C   GLY D   40      33.903  60.749  76.342  1.00 27.49           C
ATOM   10241  O   GLY D   40      34.759  61.508  76.809  1.00 27.87           O
ATOM   10242  N   SER D   41      34.190  59.823  75.430  1.00 27.22           N
ATOM   10243  CA  SER D   41      35.557  59.658  74.949  1.00 27.23           C
ATOM   10244  C   SER D   41      35.755  60.163  73.525  1.00 27.02           C
ATOM   10245  O   SER D   41      36.868  60.141  72.999  1.00 26.26           O
ATOM   10246  CB  SER D   41      35.989  58.194  75.059  1.00 25.95           C
ATOM   10247  OG  SER D   41      35.010  57.333  74.523  1.00 31.04           O
ATOM   10248  N   VAL D   42      34.676  60.626  72.903  1.00 25.99           N
ATOM   10249  CA  VAL D   42      34.761  61.151  71.549  1.00 24.16           C
ATOM   10250  C   VAL D   42      33.964  62.436  71.433  1.00 24.49           C
ATOM   10251  O   VAL D   42      32.834  62.531  71.909  1.00 24.93           O
ATOM   10252  CB  VAL D   42      34.229  60.145  70.509  1.00 25.70           C
ATOM   10253  CG1 VAL D   42      34.336  60.742  69.111  1.00 24.86           C
ATOM   10254  CG2 VAL D   42      35.015  58.855  70.584  1.00 23.84           C
ATOM   10255  N   VAL D   43      34.575  63.441  70.824  1.00 23.67           N
ATOM   10256  CA  VAL D   43      33.910  64.711  70.623  1.00 23.57           C
ATOM   10257  C   VAL D   43      33.796  64.926  69.129  1.00 23.82           C
ATOM   10258  O   VAL D   43      34.800  64.930  68.428  1.00 24.56           O
ATOM   10259  CB  VAL D   43      34.709  65.888  71.228  1.00 23.38           C
ATOM   10260  CG1 VAL D   43      34.133  67.211  70.746  1.00 22.56           C
ATOM   10261  CG2 VAL D   43      34.656  65.830  72.740  1.00 24.35           C
ATOM   10262  N   GLU D   44      32.570  65.081  68.642  1.00 24.09           N
ATOM   10263  CA  GLU D   44      32.346  65.325  67.225  1.00 22.67           C
ATOM   10264  C   GLU D   44      32.689  66.767  66.882  1.00 23.26           C
ATOM   10265  O   GLU D   44      32.359  67.695  67.622  1.00 24.11           O
ATOM   10266  CB  GLU D   44      30.885  65.078  66.848  1.00 21.10           C
ATOM   10267  CG  GLU D   44      30.482  63.620  66.749  1.00 21.10           C
ATOM   10268  CD  GLU D   44      29.042  63.458  66.316  1.00 19.37           C
ATOM   10269  OE1 GLU D   44      28.139  63.680  67.148  1.00 22.56           O
ATOM   10270  OE2 GLU D   44      28.811  63.123  65.138  1.00 20.04           O
ATOM   10271  N   GLU D   45      33.354  66.947  65.750  1.00 23.34           N
ATOM   10272  CA  GLU D   45      33.715  68.267  65.273  1.00 22.59           C
ATOM   10273  C   GLU D   45      32.480  68.854  64.580  1.00 23.92           C
ATOM   10274  O   GLU D   45      31.816  68.170  63.790  1.00 23.64           O
ATOM   10275  CB  GLU D   45      34.878  68.145  64.281  1.00 23.29           C
ATOM   10276  CG  GLU D   45      35.262  69.420  63.543  1.00 23.92           C
ATOM   10277  CD  GLU D   45      35.610  70.554  64.478  1.00 24.42           C
ATOM   10278  OE1 GLU D   45      36.050  70.280  65.607  1.00 28.87           O
ATOM   10279  OE2 GLU D   45      35.456  71.724  64.082  1.00 26.34           O
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| ATOM | 10280 | N   | HIS D | 46 | 32.162 | 70.108 | 64.893 | 1.00 21.93 | N |
|------|-------|-----|-------|-----|--------|--------|--------|-----------|---|
| ATOM | 10281 | CA  | HIS D | 46 | 31.021 | 70.786 | 64.280 | 1.00 21.97 | C |
| ATOM | 10282 | C   | HIS D | 46 | 31.570 | 71.974 | 63.490 | 1.00 21.94 | C |
| ATOM | 10283 | O   | HIS D | 46 | 31.513 | 73.126 | 63.927 | 1.00 22.09 | O |
| ATOM | 10284 | CB  | HIS D | 46 | 30.039 | 71.252 | 65.356 | 1.00 19.69 | C |
| ATOM | 10285 | CG  | HIS D | 46 | 29.478 | 70.134 | 66.177 | 1.00 20.91 | C |
| ATOM | 10286 | ND1 | HIS D | 46 | 28.644 | 69.172 | 65.650 | 1.00 19.57 | N |
| ATOM | 10287 | CD2 | HIS D | 46 | 29.650 | 69.809 | 67.481 | 1.00 20.29 | C |
| ATOM | 10288 | CE1 | HIS D | 46 | 28.326 | 68.304 | 66.594 | 1.00 19.87 | C |
| ATOM | 10289 | NE2 | HIS D | 46 | 28.924 | 68.667 | 67.714 | 1.00 18.17 | N |
| ATOM | 10290 | N   | THR D | 47 | 32.107 | 71.661 | 62.319 | 1.00 21.35 | N |
| ATOM | 10291 | CA  | THR D | 47 | 32.722 | 72.635 | 61.439 | 1.00 19.98 | C |
| ATOM | 10292 | C   | THR D | 47 | 31.933 | 73.918 | 61.209 | 1.00 19.95 | C |
| ATOM | 10293 | O   | THR D | 47 | 32.429 | 75.014 | 61.469 | 1.00 21.47 | O |
| ATOM | 10294 | CB  | THR D | 47 | 33.032 | 71.987 | 60.084 | 1.00 20.53 | C |
| ATOM | 10295 | OG1 | THR D | 47 | 33.759 | 70.769 | 60.297 | 1.00 19.90 | O |
| ATOM | 10296 | CG2 | THR D | 47 | 33.862 | 72.921 | 59.226 | 1.00 21.11 | C |
| ATOM | 10297 | N   | LEU D | 48 | 30.705 | 73.793 | 60.724 | 1.00 19.31 | N |
| ATOM | 10298 | CA  | LEU D | 48 | 29.902 | 74.972 | 60.450 | 1.00 18.73 | C |
| ATOM | 10299 | C   | LEU D | 48 | 29.549 | 75.787 | 61.691 | 1.00 19.52 | C |
| ATOM | 10300 | O   | LEU D | 48 | 29.459 | 77.016 | 61.621 | 1.00 20.68 | O |
| ATOM | 10301 | CB  | LEU D | 48 | 28.634 | 74.576 | 59.689 | 1.00 19.05 | C |
| ATOM | 10302 | CG  | LEU D | 48 | 28.908 | 73.873 | 58.354 | 1.00 17.97 | C |
| ATOM | 10303 | CD1 | LEU D | 48 | 27.603 | 73.696 | 57.588 | 1.00 17.25 | C |
| ATOM | 10304 | CD2 | LEU D | 48 | 29.888 | 74.691 | 57.538 | 1.00 15.24 | C |
| ATOM | 10305 | N   | ALA D | 49 | 29.350 | 75.117 | 62.822 | 1.00 17.10 | N |
| ATOM | 10306 | CA  | ALA D | 49 | 29.026 | 75.825 | 64.058 | 1.00 19.80 | C |
| ATOM | 10307 | C   | ALA D | 49 | 30.241 | 76.619 | 64.539 | 1.00 20.08 | C |
| ATOM | 10308 | O   | ALA D | 49 | 30.121 | 77.757 | 64.987 | 1.00 20.39 | O |
| ATOM | 10309 | CB  | ALA D | 49 | 28.597 | 74.835 | 65.138 | 1.00 20.76 | C |
| ATOM | 10310 | N   | ARG D | 50 | 31.415 | 76.010 | 64.443 | 1.00 20.55 | N |
| ATOM | 10311 | CA  | ARG D | 50 | 32.635 | 76.677 | 64.876 | 1.00 23.22 | C |
| ATOM | 10312 | C   | ARG D | 50 | 32.977 | 77.854 | 63.968 | 1.00 24.58 | C |
| ATOM | 10313 | O   | ARG D | 50 | 33.155 | 78.979 | 64.436 | 1.00 27.26 | O |
| ATOM | 10314 | CB  | ARG D | 50 | 33.798 | 75.697 | 64.883 | 1.00 23.10 | C |
| ATOM | 10315 | CG  | ARG D | 50 | 35.087 | 76.305 | 65.392 | 1.00 23.86 | C |
| ATOM | 10316 | CD  | ARG D | 50 | 36.232 | 75.351 | 65.171 | 1.00 22.39 | C |
| ATOM | 10317 | NE  | ARG D | 50 | 36.007 | 74.075 | 65.838 | 1.00 20.99 | N |
| ATOM | 10318 | CZ  | ARG D | 50 | 35.855 | 73.934 | 67.151 | 1.00 22.71 | C |
| ATOM | 10319 | NH1 | ARG D | 50 | 35.899 | 74.998 | 67.944 | 1.00 20.31 | N |
| ATOM | 10320 | NH2 | ARG D | 50 | 35.673 | 72.726 | 67.672 | 1.00 19.67 | N |
| ATOM | 10321 | N   | ARG D | 51 | 33.062 | 77.592 | 62.669 | 1.00 24.32 | N |
| ATOM | 10322 | CA  | ARG D | 51 | 33.389 | 78.630 | 61.704 | 1.00 24.55 | C |
| ATOM | 10323 | C   | ARG D | 51 | 32.385 | 79.770 | 61.802 | 1.00 25.24 | C |
| ATOM | 10324 | O   | ARG D | 51 | 32.767 | 80.934 | 61.914 | 1.00 25.83 | O |
| ATOM | 10325 | CB  | ARG D | 51 | 33.384 | 78.044 | 60.293 | 1.00 25.92 | C |
| ATOM | 10326 | CG  | ARG D | 51 | 33.924 | 78.969 | 59.220 | 1.00 26.24 | C |
| ATOM | 10327 | CD  | ARG D | 51 | 34.044 | 78.216 | 57.910 | 1.00 26.07 | C |
| ATOM | 10328 | NE  | ARG D | 51 | 34.717 | 78.988 | 56.873 | 1.00 26.86 | N |
| ATOM | 10329 | CZ  | ARG D | 51 | 34.181 | 80.011 | 56.220 | 1.00 28.37 | C |
| ATOM | 10330 | NH1 | ARG D | 51 | 32.943 | 80.413 | 56.484 | 1.00 29.37 | N |
| ATOM | 10331 | NH2 | ARG D | 51 | 34.889 | 80.632 | 55.289 | 1.00 30.46 | N |
| ATOM | 10332 | N   | GLY D | 52 | 31.100 | 79.426 | 61.771 | 1.00 24.02 | N |
| ATOM | 10333 | CA  | GLY D | 52 | 30.060 | 80.434 | 61.860 | 1.00 22.81 | C |
| ATOM | 10334 | C   | GLY D | 52 | 30.158 | 81.307 | 63.100 | 1.00 23.31 | C |
| ATOM | 10335 | O   | GLY D | 52 | 30.032 | 82.531 | 63.010 | 1.00 22.56 | O |
| ATOM | 10336 | N   | ALA D | 53 | 30.376 | 80.684 | 64.257 | 1.00 23.15 | N |
| ATOM | 10337 | CA  | ALA D | 53 | 30.494 | 81.419 | 65.514 | 1.00 22.92 | C |
| ATOM | 10338 | C   | ALA D | 53 | 31.708 | 82.340 | 65.456 | 1.00 24.19 | C |
| ATOM | 10339 | O   | ALA D | 53 | 31.631 | 83.512 | 65.824 | 1.00 24.34 | O |
| ATOM | 10340 | CB  | ALA D | 53 | 30.627 | 80.456 | 66.676 | 1.00 21.63 | C |
| ATOM | 10341 | N   | GLU D | 54 | 32.832 | 81.807 | 64.988 | 1.00 25.02 | N |
| ATOM | 10342 | CA  | GLU D | 54 | 34.043 | 82.605 | 64.878 | 1.00 24.69 | C |
| ATOM | 10343 | C   | GLU D | 54 | 33.812 | 83.813 | 63.971 | 1.00 25.33 | C |
| ATOM | 10344 | O   | GLU D | 54 | 34.109 | 84.945 | 64.357 | 1.00 26.41 | O |
| ATOM | 10345 | CB  | GLU D | 54 | 35.192 | 81.746 | 64.352 | 1.00 25.40 | C |
| ATOM | 10346 | CG  | GLU D | 54 | 35.897 | 80.936 | 65.435 | 1.00 26.19 | C |
| ATOM | 10347 | CD  | GLU D | 54 | 36.974 | 80.020 | 64.887 | 1.00 26.65 | C |
| ATOM | 10348 | OE1 | GLU D | 54 | 37.495 | 80.292 | 63.784 | 1.00 27.66 | O |
| ATOM | 10349 | OE2 | GLU D | 54 | 37.312 | 79.032 | 65.572 | 1.00 29.92 | O |
| ATOM | 10350 | N   | VAL D | 55 | 33.274 | 83.577 | 62.775 | 1.00 24.82 | N |
| ATOM | 10351 | CA  | VAL D | 55 | 33.004 | 84.661 | 61.833 | 1.00 24.16 | C |
| ATOM | 10352 | C   | VAL D | 55 | 32.073 | 85.701 | 62.442 | 1.00 25.49 | C |
| ATOM | 10353 | O   | VAL D | 55 | 32.344 | 86.903 | 62.392 | 1.00 27.79 | O |
| ATOM | 10354 | CB  | VAL D | 55 | 32.351 | 84.134 | 60.532 | 1.00 24.75 | C |
| ATOM | 10355 | CG1 | VAL D | 55 | 31.858 | 85.302 | 59.684 | 1.00 22.22 | C |
| ATOM | 10356 | CG2 | VAL D | 55 | 33.352 | 83.289 | 59.746 | 1.00 24.57 | C |
| ATOM | 10357 | N   | LEU D | 56 | 30.967 | 85.237 | 63.012 | 1.00 25.86 | N |
| ATOM | 10358 | CA  | LEU D | 56 | 29.994 | 86.134 | 63.620 | 1.00 25.24 | C |
| ATOM | 10359 | C   | LEU D | 56 | 30.639 | 87.034 | 64.668 | 1.00 26.77 | C |

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ATOM  10360  O    LEU D  56        30.426  88.249  64.677  1.00 25.92        O
ATOM  10361  CB   LEU D  56        28.869  85.324  64.263  1.00 24.17        C
ATOM  10362  CG   LEU D  56        27.795  86.119  65.005  1.00 21.62        C
ATOM  10363  CD1  LEU D  56        27.189  87.148  64.076  1.00 22.18        C
ATOM  10364  CD2  LEU D  56        26.727  85.174  65.527  1.00 20.56        C
ATOM  10365  N    TRP D  57        31.424  86.430  65.553  1.00 28.20        N
ATOM  10366  CA   TRP D  57        32.095  87.173  66.611  1.00 30.38        C
ATOM  10367  C    TRP D  57        32.995  88.244  65.999  1.00 30.83        C
ATOM  10368  O    TRP D  57        32.982  89.398  66.424  1.00 30.12        O
ATOM  10369  CB   TRP D  57        32.917  86.216  67.485  1.00 31.21        C
ATOM  10370  CG   TRP D  57        33.443  86.850  68.736  1.00 33.84        C
ATOM  10371  CD1  TRP D  57        34.749  87.092  69.046  1.00 33.92        C
ATOM  10372  CD2  TRP D  57        32.670  87.347  69.838  1.00 34.30        C
ATOM  10373  NE1  TRP D  57        34.839  87.712  70.274  1.00 35.85        N
ATOM  10374  CE2  TRP D  57        33.578  87.879  70.781  1.00 33.96        C
ATOM  10375  CE3  TRP D  57        31.296  87.394  70.121  1.00 34.95        C
ATOM  10376  CZ2  TRP D  57        33.159  88.450  71.988  1.00 35.01        C
ATOM  10377  CZ3  TRP D  57        30.878  87.962  71.322  1.00 33.93        C
ATOM  10378  CH2  TRP D  57        31.809  88.482  72.241  1.00 34.38        C
ATOM  10379  N    GLU D  58        33.765  87.854  64.989  1.00 32.16        N
ATOM  10380  CA   GLU D  58        34.667  88.777  64.315  1.00 33.72        C
ATOM  10381  C    GLU D  58        33.934  89.939  63.674  1.00 33.55        C
ATOM  10382  O    GLU D  58        34.332  91.092  63.828  1.00 33.29        O
ATOM  10383  CB   GLU D  58        35.463  88.051  63.238  1.00 36.95        C
ATOM  10384  CG   GLU D  58        36.716  87.378  63.740  1.00 41.76        C
ATOM  10385  CD   GLU D  58        37.504  86.756  62.609  1.00 46.65        C
ATOM  10386  OE1  GLU D  58        37.681  87.439  61.575  1.00 46.54        O
ATOM  10387  OE2  GLU D  58        37.947  85.592  62.754  1.00 49.71        O
ATOM  10388  N    GLN D  59        32.869  89.632  62.941  1.00 33.29        N
ATOM  10389  CA   GLN D  59        32.100  90.667  62.275  1.00 31.94        C
ATOM  10390  C    GLN D  59        31.462  91.601  63.290  1.00 32.35        C
ATOM  10391  O    GLN D  59        31.335  92.794  63.034  1.00 33.35        O
ATOM  10392  CB   GLN D  59        31.012  90.052  61.390  1.00 32.37        C
ATOM  10393  CG   GLN D  59        31.520  89.057  60.358  1.00 32.45        C
ATOM  10394  CD   GLN D  59        30.425  88.605  59.397  1.00 34.03        C
ATOM  10395  OE1  GLN D  59        29.270  88.419  59.792  1.00 32.95        O
ATOM  10396  NE2  GLN D  59        30.787  88.415  58.135  1.00 32.48        N
ATOM  10397  N    LEU D  60        31.055  91.067  64.438  1.00 31.81        N
ATOM  10398  CA   LEU D  60        30.432  91.903  65.462  1.00 33.57        C
ATOM  10399  C    LEU D  60        31.395  92.967  65.979  1.00 34.53        C
ATOM  10400  O    LEU D  60        30.975  93.970  66.546  1.00 35.76        O
ATOM  10401  CB   LEU D  60        29.924  91.051  66.634  1.00 32.03        C
ATOM  10402  CG   LEU D  60        28.592  90.315  66.444  1.00 30.74        C
ATOM  10403  CD1  LEU D  60        28.268  89.504  67.694  1.00 31.15        C
ATOM  10404  CD2  LEU D  60        27.488  91.311  66.169  1.00 29.84        C
ATOM  10405  N    HIS D  61        32.688  92.749  65.777  1.00 36.92        N
ATOM  10406  CA   HIS D  61        33.692  93.704  66.222  1.00 39.34        C
ATOM  10407  C    HIS D  61        34.218  94.577  65.085  1.00 40.96        C·
ATOM  10408  O    HIS D  61        34.395  95.782  65.261  1.00 41.84        O
ATOM  10409  CB   HIS D  61        34.856  92.968  66.887  1.00 40.47        C
ATOM  10410  CG   HIS D  61        34.502  92.342  68.200  1.00 42.70        C
ATOM  10411  ND1  HIS D  61        34.246  93.085  69.333  1.00 43.45        N
ATOM  10412  CD2  HIS D  61        34.346  91.045  68.558  1.00 43.39        C
ATOM  10413  CE1  HIS D  61        33.947  92.272  70.332  1.00 44.98        C
ATOM  10414  NE2  HIS D  61        34.000  91.029  69.888  1.00 44.94        N
ATOM  10415  N    ASP D  62        34.446  93.979  63.918  1.00 41.46        N
ATOM  10416  CA   ASP D  62        34.980  94.719  62.777  1.00 42.04        C
ATOM  10417  C    ASP D  62        33.989  95.551  61.974  1.00 42.20        C
ATOM  10418  O    ASP D  62        34.398  96.450  61.246  1.00 43.78        O
ATOM  10419  CB   ASP D  62        35.695  93.770  61.815  1.00 43.63        C
ATOM  10420  CG   ASP D  62        36.750  92.939  62.501  1.00 44.46        C
ATOM  10421  OD1  ASP D  62        37.427  93.477  63.399  1.00 45.11        O
ATOM  10422  OD2  ASP D  62        36.907  91.755  62.137  1.00 46.78        O
ATOM  10423  N    LEU D  63        32.699  95.261  62.084  1.00 41.11        N
ATOM  10424  CA   LEU D  63        31.711  96.019  61.323  1.00 39.64        C
ATOM  10425  C    LEU D  63        31.013  97.051  62.192  1.00 39.30        C
ATOM  10426  O    LEU D  63        30.944  96.900  63.412  1.00 39.82        O
ATOM  10427  CB   LEU D  63        30.665  95.080  60.709  1.00 38.71        C
ATOM  10428  CG   LEU D  63        31.173  93.939  59.822  1.00 38.74        C
ATOM  10429  CD1  LEU D  63        29.985  93.231  59.187  1.00 37.50        C
ATOM  10430  CD2  LEU D  63        32.094  94.482  58.749  1.00 37.46        C
ATOM  10431  N    GLU D  64        30.500  98.101  61.556  1.00 38.01        N
ATOM  10432  CA   GLU D  64        29.796  99.157  62.271  1.00 38.49        C
ATOM  10433  C    GLU D  64        28.620  98.495  62.980  1.00 36.70        C
ATOM  10434  O    GLU D  64        28.159  98.957  64.024  1.00 35.89        O
ATOM  10435  CB   GLU D  64        29.299 100.219  61.286  1.00 40.02        C
ATOM  10436  CG   GLU D  64        29.108 101.595  61.902  1.00 43.57        C
ATOM  10437  CD   GLU D  64        28.741 102.648  60.869  1.00 46.55        C
ATOM  10438  OE1  GLU D  64        29.408 102.703  59.813  1.00 47.51        O
ATOM  10439  OE2  GLU D  64        27.792 103.427  61.113  1.00 48.00        O
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ATOM  10440  N    TRP D  65     28.141  97.407  62.383  1.00 34.97        N
ATOM  10441  CA   TRP D  65     27.049  96.612  62.931  1.00 33.86        C
ATOM  10442  C    TRP D  65     26.685  95.497  61.951  1.00 33.46        C
ATOM  10443  O    TRP D  65     26.996  95.572  60.758  1.00 32.17        O
ATOM  10444  CB   TRP D  65     25.828  97.493  63.259  1.00 32.87        C
ATOM  10445  CG   TRP D  65     24.897  97.799  62.124  1.00 33.97        C
ATOM  10446  CD1  TRP D  65     23.867  97.022  61.678  1.00 33.24        C
ATOM  10447  CD2  TRP D  65     24.879  98.988  61.322  1.00 35.25        C
ATOM  10448  NE1  TRP D  65     23.203  97.653  60.653  1.00 33.99        N
ATOM  10449  CE2  TRP D  65     23.805  98.862  60.412  1.00 35.12        C
ATOM  10450  CE3  TRP D  65     25.666 100.150  61.283  1.00 35.29        C
ATOM  10451  CZ2  TRP D  65     23.496  99.856  59.471  1.00 35.40        C
ATOM  10452  CZ3  TRP D  65     25.359 101.138  60.349  1.00 35.02        C
ATOM  10453  CH2  TRP D  65     24.281 100.983  59.455  1.00 34.14        C
ATOM  10454  N    VAL D  66     26.052  94.450  62.472  1.00 32.56        N
ATOM  10455  CA   VAL D  66     25.648  93.304  61.668  1.00 29.92        C
ATOM  10456  C    VAL D  66     24.131  93.232  61.585  1.00 29.37        C
ATOM  10457  O    VAL D  66     23.455  93.130  62.611  1.00 29.85        O
ATOM  10458  CB   VAL D  66     26.171  91.989  62.288  1.00 29.38        C
ATOM  10459  CG1  VAL D  66     25.662  90.804  61.496  1.00 29.24        C
ATOM  10460  CG2  VAL D  66     27.701  91.999  62.323  1.00 27.24        C
ATOM  10461  N    ASN D  67     23.594  93.299  60.370  1.00 28.14        N
ATOM  10462  CA   ASN D  67     22.149  93.218  60.189  1.00 28.10        C
ATOM  10463  C    ASN D  67     21.752  91.978  59.398  1.00 27.96        C
ATOM  10464  O    ASN D  67     22.566  91.394  58.674  1.00 28.12        O
ATOM  10465  CB   ASN D  67     21.604  94.475  59.492  1.00 28.17        C
ATOM  10466  CG   ASN D  67     22.252  94.735  58.139  1.00 28.99        C
ATOM  10467  OD1  ASN D  67     22.923  93.874  57.574  1.00 29.51        O
ATOM  10468  ND2  ASN D  67     22.035  95.929  57.610  1.00 28.71        N
ATOM  10469  N    ALA D  68     20.494  91.574  59.544  1.00 27.32        N
ATOM  10470  CA   ALA D  68     19.996  90.401  58.848  1.00 25.44        C
ATOM  10471  C    ALA D  68     18.488  90.461  58.711  1.00 24.24        C
ATOM  10472  O    ALA D  68     17.835  91.316  59.306  1.00 26.04        O
ATOM  10473  CB   ALA D  68     20.398  89.143  59.607  1.00 25.83        C
ATOM  10474  N    LEU D  69     17.951  89.542  57.915  1.00 23.31        N
ATOM  10475  CA   LEU D  69     16.517  89.428  57.683  1.00 22.49        C
ATOM  10476  C    LEU D  69     16.140  87.982  57.998  1.00 22.43        C
ATOM  10477  O    LEU D  69     16.951  87.077  57.812  1.00 23.91        O
ATOM  10478  CB   LEU D  69     16.184  89.725  56.214  1.00 22.38        C
ATOM  10479  CG   LEU D  69     16.621  91.058  55.603  1.00 21.94        C
ATOM  10480  CD1  LEU D  69     16.448  90.999  54.096  1.00 22.34        C
ATOM  10481  CD2  LEU D  69     15.815  92.204  56.201  1.00 20.97        C
ATOM  10482  N    GLY D  70     14.917  87.762  58.470  1.00 22.25        N
ATOM  10483  CA   GLY D  70     14.489  86.409  58.779  1.00 20.88        C
ATOM  10484  C    GLY D  70     14.418  85.538  57.539  1.00 21.62        C
ATOM  10485  O    GLY D  70     13.900  85.974  56.506  1.00 23.44        O
ATOM  10486  N    ALA D  71     14.947  84.317  57.628  1.00 20.09        N
ATOM  10487  CA   ALA D  71     14.927  83.375  56.506  1.00 19.51        C
ATOM  10488  C    ALA D  71     14.252  82.075  56.930  1.00 20.25        C
ATOM  10489  O    ALA D  71     14.596  81.505  57.969  1.00 20.02        O
ATOM  10490  CB   ALA D  71     16.341  83.086  56.028  1.00 16.38        C
ATOM  10491  N    LEU D  72     13.300  81.602  56.129  1.00 20.12        N
ATOM  10492  CA   LEU D  72     12.600  80.368  56.465  1.00 19.22        C
ATOM  10493  C    LEU D  72     12.822  79.228  55.466  1.00 20.25        C
ATOM  10494  O    LEU D  72     12.348  78.114  55.684  1.00 19.19        O
ATOM  10495  CB   LEU D  72     11.105  80.634  56.635  1.00 19.70        C
ATOM  10496  CG   LEU D  72     10.327  81.100  55.405  1.00 19.78        C
ATOM  10497  CD1  LEU D  72      9.137  80.165  55.181  1.00 17.18        C
ATOM  10498  CD2  LEU D  72      9.872  82.543  55.606  1.00 16.67        C
ATOM  10499  N    THR D  73     13.522  79.509  54.368  1.00 19.56        N
ATOM  10500  CA   THR D  73     13.839  78.480  53.382  1.00 18.62        C
ATOM  10501  C    THR D  73     15.295  78.675  52.953  1.00 19.70        C
ATOM  10502  O    THR D  73     15.860  79.760  53.119  1.00 20.89        O
ATOM  10503  CB   THR D  73     12.935  78.551  52.128  1.00 17.93        C
ATOM  10504  OG1  THR D  73     13.386  79.595  51.259  1.00 18.65        O
ATOM  10505  CG2  THR D  73     11.494  78.815  52.527  1.00 16.95        C
ATOM  10506  N    GLY D  74     15.905  77.623  52.419  1.00 18.90        N
ATOM  10507  CA   GLY D  74     17.287  77.718  51.981  1.00 20.34        C
ATOM  10508  C    GLY D  74     17.520  78.804  50.941  1.00 20.88        C
ATOM  10509  O    GLY D  74     18.429  79.626  51.085  1.00 19.98        O
ATOM  10510  N    ASN D  75     16.706  78.802  49.887  1.00 19.80        N
ATOM  10511  CA   ASN D  75     16.825  79.792  48.825  1.00 18.79        C
ATOM  10512  C    ASN D  75     16.738  81.207  49.402  1.00 20.40        C
ATOM  10513  O    ASN D  75     17.405  82.125  48.922  1.00 20.74        O
ATOM  10514  CB   ASN D  75     15.714  79.602  47.789  1.00 19.03        C
ATOM  10515  CG   ASN D  75     15.928  78.390  46.898  1.00 18.14        C
ATOM  10516  OD1  ASN D  75     16.786  77.538  47.159  1.00 21.25        O
ATOM  10517  ND2  ASN D  75     15.133  78.301  45.837  1.00 15.09        N
ATOM  10518  N    MET D  76     15.911  81.391  50.425  1.00 19.72        N
ATOM  10519  CA   MET D  76     15.783  82.709  51.033  1.00 21.54        C
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| ATOM | 10520 | C | MET D | 76 | 17.136 | 83.188 | 51.547 | 1.00 | 22.92 | C |
|------|-------|-----|-------|----|--------|--------|--------|------|-------|---|
| ATOM | 10521 | O | MET D | 76 | 17.544 | 84.325 | 51.293 | 1.00 | 24.30 | O |
| ATOM | 10522 | CB | MET D | 76 | 14.783 | 82.680 | 52.189 | 1.00 | 20.85 | C |
| ATOM | 10523 | CG | MET D | 76 | 13.486 | 83.384 | 51.885 | 1.00 | 20.88 | C |
| ATOM | 10524 | SD | MET D | 76 | 12.348 | 83.443 | 53.272 | 1.00 | 22.07 | S |
| ATOM | 10525 | CE | MET D | 76 | 10.815 | 83.181 | 52.453 | 1.00 | 20.33 | C |
| ATOM | 10526 | N | ALA D | 77 | 17.824 | 82.315 | 52.274 | 1.00 | 23.02 | N |
| ATOM | 10527 | CA | ALA D | 77 | 19.130 | 82.639 | 52.821 | 1.00 | 22.43 | C |
| ATOM | 10528 | C | ALA D | 77 | 20.123 | 82.887 | 51.693 | 1.00 | 23.62 | C |
| ATOM | 10529 | O | ALA D | 77 | 20.948 | 83.802 | 51.776 | 1.00 | 24.44 | O |
| ATOM | 10530 | CB | ALA D | 77 | 19.624 | 81.506 | 53.717 | 1.00 | 21.32 | C |
| ATOM | 10531 | N | VAL D | 78 | 20.045 | 82.083 | 50.634 | 1.00 | 22.98 | N |
| ATOM | 10532 | CA | VAL D | 78 | 20.968 | 82.250 | 49.518 | 1.00 | 21.80 | C |
| ATOM | 10533 | C | VAL D | 78 | 20.855 | 83.640 | 48.900 | 1.00 | 22.27 | C |
| ATOM | 10534 | O | VAL D | 78 | 21.866 | 84.300 | 48.678 | 1.00 | 23.01 | O |
| ATOM | 10535 | CB | VAL D | 78 | 20.744 | 81.174 | 48.429 | 1.00 | 22.03 | C |
| ATOM | 10536 | CG1 | VAL D | 78 | 21.514 | 81.537 | 47.151 | 1.00 | 19.99 | C |
| ATOM | 10537 | CG2 | VAL D | 78 | 21.232 | 79.820 | 48.945 | 1.00 | 21.06 | C |
| ATOM | 10538 | N | GLN D | 79 | 19.632 | 84.085 | 48.630 | 1.00 | 21.33 | N |
| ATOM | 10539 | CA | GLN D | 79 | 19.425 | 85.404 | 48.042 | 1.00 | 22.85 | C |
| ATOM | 10540 | C | GLN D | 79 | 19.887 | 86.508 | 49.002 | 1.00 | 23.91 | C |
| ATOM | 10541 | O | GLN D | 79 | 20.361 | 87.562 | 48.576 | 1.00 | 23.41 | O |
| ATOM | 10542 | CB | GLN D | 79 | 17.948 | 85.614 | 47.691 | 1.00 | 22.08 | C |
| ATOM | 10543 | CG | GLN D | 79 | 17.406 | 84.686 | 46.602 | 1.00 | 20.90 | C |
| ATOM | 10544 | CD | GLN D | 79 | 18.283 | 84.642 | 45.363 | 1.00 | 22.59 | C |
| ATOM | 10545 | OE1 | GLN D | 79 | 18.882 | 85.646 | 44.972 | 1.00 | 23.31 | O |
| ATOM | 10546 | NE2 | GLN D | 79 | 18.350 | 83.475 | 44.727 | 1.00 | 21.66 | N |
| ATOM | 10547 | N | GLN D | 80 | 19.747 | 86.264 | 50.300 | 1.00 | 22.85 | N |
| ATOM | 10548 | CA | GLN D | 80 | 20.162 | 87.248 | 51.281 | 1.00 | 23.27 | C |
| ATOM | 10549 | C | GLN D | 80 | 21.672 | 87.449 | 51.222 | 1.00 | 24.09 | C |
| ATOM | 10550 | O | GLN D | 80 | 22.159 | 88.577 | 51.296 | 1.00 | 25.11 | O |
| ATOM | 10551 | CB | GLN D | 80 | 19.717 | 86.811 | 52.678 | 1.00 | 23.13 | C |
| ATOM | 10552 | CG | GLN D | 80 | 18.235 | 87.032 | 52.912 | 1.00 | 20.01 | C |
| ATOM | 10553 | CD | GLN D | 80 | 17.738 | 86.383 | 54.173 | 1.00 | 20.44 | C |
| ATOM | 10554 | OE1 | GLN D | 80 | 18.520 | 85.853 | 54.963 | 1.00 | 24.72 | O |
| ATOM | 10555 | NE2 | GLN D | 80 | 16.427 | 86.416 | 54.377 | 1.00 | 19.94 | N |
| ATOM | 10556 | N | VAL D | 81 | 22.410 | 86.357 | 51.060 | 1.00 | 25.27 | N |
| ATOM | 10557 | CA | VAL D | 81 | 23.862 | 86.433 | 50.982 | 1.00 | 25.58 | C |
| ATOM | 10558 | C | VAL D | 81 | 24.292 | 86.973 | 49.622 | 1.00 | 28.15 | C |
| ATOM | 10559 | O | VAL D | 81 | 25.242 | 87.752 | 49.529 | 1.00 | 28.62 | O |
| ATOM | 10560 | CB | VAL D | 81 | 24.503 | 85.055 | 51.211 | 1.00 | 25.58 | C |
| ATOM | 10561 | CG1 | VAL D | 81 | 26.013 | 85.137 | 50.986 | 1.00 | 25.09 | C |
| ATOM | 10562 | CG2 | VAL D | 81 | 24.205 | 84.581 | 52.635 | 1.00 | 23.69 | C |
| ATOM | 10563 | N | ARG D | 82 | 23.589 | 86.559 | 48.571 | 1.00 | 28.29 | N |
| ATOM | 10564 | CA | ARG D | 82 | 23.885 | 87.028 | 47.223 | 1.00 | 29.27 | C |
| ATOM | 10565 | C | ARG D | 82 | 23.745 | 88.550 | 47.189 | 1.00 | 29.62 | C |
| ATOM | 10566 | O | ARG D | 82 | 24.544 | 89.239 | 46.564 | 1.00 | 30.87 | O |
| ATOM | 10567 | CB | ARG D | 82 | 22.909 | 86.407 | 46.217 | 1.00 | 30.34 | C |
| ATOM | 10568 | CG | ARG D | 82 | 22.938 | 87.046· | 44.831 | 1.00 | 30.16 | C |
| ATOM | 10569 | CD | ARG D | 82 | 24.207 | 86.701 | 44.078 | 1.00 | 31.58 | C |
| ATOM | 10570 | NE | ARG D | 82 | 24.215 | 85.304 | 43.650 | 1.00 | 32.84 | N |
| ATOM | 10571 | CZ | ARG D | 82 | 25.278 | 84.692 | 43.140 | 1.00 | 34.77 | C |
| ATOM | 10572 | NH1 | ARG D | 82 | 26.419 | 85.357 | 42.998 | 1.00 | 34.68 | N |
| ATOM | 10573 | NH2 | ARG D | 82 | 25.207 | 83.414 | 42.782 | 1.00 | 35.90 | N |
| ATOM | 10574 | N | ALA D | 83 | 22.725 | 89.056 | 47.877 | 1.00 | 29.74 | N |
| ATOM | 10575 | CA | ALA D | 83 | 22.442 | 90.487 | 47.938 | 1.00 | 29.48 | C |
| ATOM | 10576 | C | ALA D | 83 | 23.462 | 91.280 | 48.749 | 1.00 | 30.01 | C |
| ATOM | 10577 | O | ALA D | 83 | 23.465 | 92.512 | 48.712 | 1.00 | 30.46 | O |
| ATOM | 10578 | CB | ALA D | 83 | 21.048 | 90.710 | 48.507 | 1.00 | 30.75 | C |
| ATOM | 10579 | N | GLY D | 84 | 24.316 | 90.582 | 49.494 | 1.00 | 29.82 | N |
| ATOM | 10580 | CA | GLY D | 84 | 25.327 | 91.272 | 50.276 | 1.00 | 28.63 | C |
| ATOM | 10581 | C | GLY D | 84 | 25.272 | 91.159 | 51.792 | 1.00 | 28.92 | C |
| ATOM | 10582 | O | GLY D | 84 | 26.222 | 91.567 | 52.467 | 1.00 | 28.30 | O |
| ATOM | 10583 | N | LEU D | 85 | 24.185 | 90.620 | 52.343 | 1.00 | 27.26 | N |
| ATOM | 10584 | CA | LEU D | 85 | 24.083 | 90.495 | 53.792 | 1.00 | 26.91 | C |
| ATOM | 10585 | C | LEU D | 85 | 25.159 | 89.529 | 54.284 | 1.00 | 27.22 | C |
| ATOM | 10586 | O | LEU D | 85 | 25.578 | 88.639 | 53.550 | 1.00 | 28.85 | O |
| ATOM | 10587 | CB | LEU D | 85 | 22.676 | 90.027 | 54.183 | 1.00 | 25.69 | C |
| ATOM | 10588 | CG | LEU D | 85 | 21.585 | 90.978 | 53.676 | 1.00 | 25.47 | C |
| ATOM | 10589 | CD1 | LEU D | 85 | 20.238 | 90.591 | 54.255 | 1.00 | 25.28 | C |
| ATOM | 10590 | CD2 | LEU D | 85 | 21.928 | 92.413 | 54.072 | 1.00 | 25.91 | C |
| ATOM | 10591 | N | LYS D | 86 | 25.626 | 89.713 | 55.513 | 1.00 | 27.96 | N |
| ATOM | 10592 | CA | LYS D | 86 | 26.684 | 88.858 | 56.042 | 1.00 | 29.03 | C |
| ATOM | 10593 | C | LYS D | 86 | 26.292 | 88.004 | 57.244 | 1.00 | 29.00 | C |
| ATOM | 10594 | O | LYS D | 86 | 27.153 | 87.445 | 57.927 | 1.00 | 28.15 | O |
| ATOM | 10595 | CB | LYS D | 86 | 27.907 | 89.708 | 56.388 | 1.00 | 31.54 | C |
| ATOM | 10596 | CG | LYS D | 86 | 28.554 | 90.364 | 55.183 | 1.00 | 34.11 | C |
| ATOM | 10597 | CD | LYS D | 86 | 29.861 | 91.034 | 55.573 | 1.00 | 38.11 | C |
| ATOM | 10598 | CE | LYS D | 86 | 30.532 | 91.694 | 54.378 | 1.00 | 38.52 | C |
| ATOM | 10599 | NZ | LYS D | 86 | 31.863 | 92.259 | 54.754 | 1.00 | 40.55 | N |

| ATOM | 10600 | N | ALA | D | 87 | 24.990 | 87.910 | 57.492 | 1.00 | 27.79 | N |
|------|-------|-----|-----|---|----|--------|--------|--------|------|-------|---|
| ATOM | 10601 | CA | ALA | D | 87 | 24.458 | 87.110 | 58.584 | 1.00 | 26.48 | C |
| ATOM | 10602 | C | ALA | D | 87 | 23.037 | 86.690 | 58.211 | 1.00 | 26.59 | C |
| ATOM | 10603 | O | ALA | D | 87 | 22.376 | 87.351 | 57.402 | 1.00 | 24.38 | O |
| ATOM | 10604 | CB | ALA | D | 87 | 24.444 | 87.920 | 59.869 | 1.00 | 27.09 | C |
| ATOM | 10605 | N | ILE | D | 88 | 22.572 | 85.586 | 58.785 | 1.00 | 23.91 | N |
| ATOM | 10606 | CA | ILE | D | 88 | 21.220 | 85.117 | 58.510 | 1.00 | 22.75 | C |
| ATOM | 10607 | C | ILE | D | 88 | 20.461 | 84.995 | 59.819 | 1.00 | 22.89 | C |
| ATOM | 10608 | O | ILE | D | 88 | 20.985 | 84.448 | 60.790 | 1.00 | 23.40 | O |
| ATOM | 10609 | CB | ILE | D | 88 | 21.230 | 83.737 | 57.818 | 1.00 | 21.89 | C |
| ATOM | 10610 | CG1 | ILE | D | 88 | 21.904 | 83.846 | 56.455 | 1.00 | 21.43 | C |
| ATOM | 10611 | CG2 | ILE | D | 88 | 19.811 | 83.220 | 57.666 | 1.00 | 19.18 | C |
| ATOM | 10612 | CD1 | ILE | D | 88 | 22.128 | 82.527 | 55.797 | 1.00 | 24.09 | C |
| ATOM | 10613 | N | TYR | D | 89 | 19.237 | 85.515 | 59.853 | 1.00 | 21.54 | N |
| ATOM | 10614 | CA | TYR | D | 89 | 18.426 | 85.415 | 61.059 | 1.00 | 21.71 | C |
| ATOM | 10615 | C | TYR | D | 89 | 17.347 | 84.345 | 60.865 | 1.00 | 23.04 | C |
| ATOM | 10616 | O | TYR | D | 89 | 16.601 | 84.368 | 59.881 | 1.00 | 23.99 | O |
| ATOM | 10617 | CB | TYR | D | 89 | 17.761 | 86.751 | 61.400 | 1.00 | 21.80 | C |
| ATOM | 10618 | CG | TYR | D | 89 | 16.900 | 86.631 | 62.629 | 1.00 | 23.45 | C |
| ATOM | 10619 | CD1 | TYR | D | 89 | 17.476 | 86.421 | 63.880 | 1.00 | 23.19 | C |
| ATOM | 10620 | CD2 | TYR | D | 89 | 15.508 | 86.598 | 62.529 | 1.00 | 22.13 | C |
| ATOM | 10621 | CE1 | TYR | D | 89 | 16.690 | 86.169 | 64.996 | 1.00 | 24.47 | C |
| ATOM | 10622 | CE2 | TYR | D | 89 | 14.712 | 86.348 | 63.640 | 1.00 | 21.56 | C |
| ATOM | 10623 | CZ | TYR | D | 89 | 15.310 | 86.132 | 64.867 | 1.00 | 21.84 | C |
| ATOM | 10624 | OH | TYR | D | 89 | 14.537 | 85.871 | 65.968 | 1.00 | 23.05 | O |
| ATOM | 10625 | N | LEU | D | 90 | 17.266 | 83.412 | 61.805 | 1.00 | 21.57 | N |
| ATOM | 10626 | CA | LEU | D | 90 | 16.290 | 82.333 | 61.732 | 1.00 | 21.73 | C |
| ATOM | 10627 | C | LEU | D | 90 | 15.204 | 82.498 | 62.801 | 1.00 | 21.55 | C |
| ATOM | 10628 | O | LEU | D | 90 | 15.365 | 82.102 | 63.958 | 1.00 | 21.66 | O |
| ATOM | 10629 | CB | LEU | D | 90 | 17.018 | 80.989 | 61.868 | 1.00 | 21.72 | C |
| ATOM | 10630 | CG | LEU | D | 90 | 16.284 | 79.637 | 61.832 | 1.00 | 23.58 | C |
| ATOM | 10631 | CD1 | LEU | D | 90 | 14.927 | 79.735 | 61.189 | 1.00 | 21.93 | C |
| ATOM | 10632 | CD2 | LEU | D | 90 | 17.165 | 78.647 | 61.090 | 1.00 | 20.46 | C |
| ATOM | 10633 | N | SER | D | 91 | 14.097 | 83.096 | 62.379 | 1.00 | 21.18 | N |
| ATOM | 10634 | CA | SER | D | 91 | 12.936 | 83.375 | 63.223 | 1.00 | 21.35 | C |
| ATOM | 10635 | C | SER | D | 91 | 12.113 | 82.147 | 63.604 | 1.00 | 21.02 | C |
| ATOM | 10636 | O | SER | D | 91 | 11.770 | 81.332 | 62.746 | 1.00 | 20.89 | O |
| ATOM | 10637 | CB | SER | D | 91 | 12.020 | 84.376 | 62.500 | 1.00 | 22.01 | C |
| ATOM | 10638 | OG | SER | D | 91 | 10.683 | 84.314 | 62.982 | 1.00 | 18.62 | O |
| ATOM | 10639 | N | GLY | D | 92 | 11.790 | 82.029 | 64.890 | 1.00 | 20.61 | N |
| ATOM | 10640 | CA | GLY | D | 92 | 10.972 | 80.919 | 65.351 | 1.00 | 20.19 | C |
| ATOM | 10641 | C | GLY | D | 92 | 9.536 | 81.203 | 64.940 | 1.00 | 21.95 | C |
| ATOM | 10642 | O | GLY | D | 92 | 8.740 | 80.288 | 64.699 | 1.00 | 23.90 | O |
| ATOM | 10643 | N | TRP | D | 93 | 9.209 | 82.490 | 64.864 | 1.00 | 20.26 | N |
| ATOM | 10644 | CA | TRP | D | 93 | 7.881 | 82.941 | 64.464 | 1.00 | 20.26 | C |
| ATOM | 10645 | C | TRP | D | 93 | 7.577 | 82.392 | 63.067 | 1.00 | 20.08 | C |
| ATOM | 10646 | O | TRP | D | 93 | 6.510 | 81.824 | 62.829 | 1.00 | 20.18 | O |
| ATOM | 10647 | CB | TRP | D | 93 | 7.831 | 84.482 | 64.427 | 1.00 | 19.84 | C |
| ATOM | 10648 | CG | TRP | D | 93 | 6.443 | 85.058 | 64.274 | 1.00 | 19.03 | C |
| ATOM | 10649 | CD1 | TRP | D | 93 | 5.688 | 85.647 | 65.251 | 1.00 | 20.27 | C |
| ATOM | 10650 | CD2 | TRP | D | 93 | 5.614 | 85.021 | 63.099 | 1.00 | 18.49 | C |
| ATOM | 10651 | NE1 | TRP | D | 93 | 4.444 | 85.968 | 64.764 | 1.00 | 17.11 | N |
| ATOM | 10652 | CE2 | TRP | D | 93 | 4.370 | 85.595 | 63.448 | 1.00 | 17.21 | C |
| ATOM | 10653 | CE3 | TRP | D | 93 | 5.800 | 84.555 | 61.789 | 1.00 | 18.58 | C |
| ATOM | 10654 | CZ2 | TRP | D | 93 | 3.316 | 85.714 | 62.534 | 1.00 | 18.22 | C |
| ATOM | 10655 | CZ3 | TRP | D | 93 | 4.751 | 84.673 | 60.881 | 1.00 | 16.72 | C |
| ATOM | 10656 | CH2 | TRP | D | 93 | 3.524 | 85.249 | 61.261 | 1.00 | 18.29 | C |
| ATOM | 10657 | N | GLN | D | 94 | 8.522 | 82.576 | 62.148 | 1.00 | 19.80 | N |
| ATOM | 10658 | CA | GLN | D | 94 | 8.362 | 82.118 | 60.772 | 1.00 | 18.79 | C |
| ATOM | 10659 | C | GLN | D | 94 | 8.325 | 80.594 | 60.682 | 1.00 | 17.79 | C |
| ATOM | 10660 | O | GLN | D | 94 | 7.616 | 80.030 | 59.849 | 1.00 | 17.52 | O |
| ATOM | 10661 | CB | GLN | D | 94 | 9.492 | 82.668 | 59.898 | 1.00 | 19.40 | C |
| ATOM | 10662 | CG | GLN | D | 94 | 9.528 | 84.188 | 59.817 | 1.00 | 20.16 | C |
| ATOM | 10663 | CD | GLN | D | 94 | 10.553 | 84.696 | 58.822 | 1.00 | 20.66 | C |
| ATOM | 10664 | OE1 | GLN | D | 94 | 11.649 | 84.154 | 58.713 | 1.00 | 21.99 | O |
| ATOM | 10665 | NE2 | GLN | D | 94 | 10.205 | 85.755 | 58.102 | 1.00 | 22.83 | N |
| ATOM | 10666 | N | VAL | D | 95 | 9.093 | 79.931 | 61.536 | 1.00 | 16.97 | N |
| ATOM | 10667 | CA | VAL | D | 95 | 9.115 | 78.474 | 61.553 | 1.00 | 16.43 | C |
| ATOM | 10668 | C | VAL | D | 95 | 7.740 | 77.973 | 61.995 | 1.00 | 17.89 | C |
| ATOM | 10669 | O | VAL | D | 95 | 7.203 | 77.027 | 61.424 | 1.00 | 18.23 | O |
| ATOM | 10670 | CB | VAL | D | 95 | 10.221 | 77.964 | 62.501 | 1.00 | 15.79 | C |
| ATOM | 10671 | CG1 | VAL | D | 95 | 9.997 | 76.502 | 62.865 | 1.00 | 13.06 | C |
| ATOM | 10672 | CG2 | VAL | D | 95 | 11.567 | 78.143 | 61.830 | 1.00 | 10.33 | C |
| ATOM | 10673 | N | ALA | D | 96 | 7.166 | 78.626 | 63.001 | 1.00 | 17.14 | N |
| ATOM | 10674 | CA | ALA | D | 96 | 5.841 | 78.255 | 63.490 | 1.00 | 18.29 | C |
| ATOM | 10675 | C | ALA | D | 96 | 4.797 | 78.507 | 62.408 | 1.00 | 19.19 | C |
| ATOM | 10676 | O | ALA | D | 96 | 3.887 | 77.707 | 62.198 | 1.00 | 19.68 | O |
| ATOM | 10677 | CB | ALA | D | 96 | 5.489 | 79.078 | 64.736 | 1.00 | 17.63 | C |
| ATOM | 10678 | N | GLY | D | 97 | 4.940 | 79.630 | 61.716 | 1.00 | 19.62 | N |
| ATOM | 10679 | CA | GLY | D | 97 | 3.976 | 79.983 | 60.695 | 1.00 | 20.07 | C |

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ATOM   10680  C    GLY D  97      4.036  79.261  59.366  1.00 20.55           C
ATOM   10681  O    GLY D  97      2.995  79.024  58.753  1.00 20.34           O
ATOM   10682  N    ASP D  98      5.227  78.886  58.912  1.00 20.66           N
ATOM   10683  CA   ASP D  98      5.311  78.240  57.609  1.00 20.63           C
ATOM   10684  C    ASP D  98      6.474  77.262  57.398  1.00 21.30           C
ATOM   10685  O    ASP D  98      6.762  76.890  56.256  1.00 20.42           O
ATOM   10686  CB   ASP D  98      5.360  79.342  56.545  1.00 19.81           C
ATOM   10687  CG   ASP D  98      4.886  78.876  55.190  1.00 19.09           C
ATOM   10688  OD1  ASP D  98      3.988  78.014  55.130  1.00 19.08           O
ATOM   10689  OD2  ASP D  98      5.398  79.398  54.180  1.00 23.07           O
ATOM   10690  N    ALA D  99      7.134  76.828  58.473  1.00 19.97           N
ATOM   10691  CA   ALA D  99      8.257  75.909  58.305  1.00 18.15           C
ATOM   10692  C    ALA D  99      8.635  75.036  59.499  1.00 16.86           C
ATOM   10693  O    ALA D  99      9.813  74.933  59.835  1.00 16.49           O
ATOM   10694  CB   ALA D  99      9.488  76.691  57.833  1.00 13.03           C
ATOM   10695  N    ASN D 100      7.664  74.399  60.143  1.00 16.45           N
ATOM   10696  CA   ASN D 100      8.006  73.536  61.274  1.00 16.52           C
ATOM   10697  C    ASN D 100      7.680  72.064  60.990  1.00 16.17           C
ATOM   10698  O    ASN D 100      6.889  71.744  60.093  1.00 15.61           O
ATOM   10699  CB   ASN D 100      7.315  74.006  62.560  1.00 16.91           C
ATOM   10700  CG   ASN D 100      5.815  73.878  62.500  1.00 16.63           C
ATOM   10701  OD1  ASN D 100      5.115  74.827  62.139  1.00 21.19           O
ATOM   10702  ND2  ASN D 100      5.305  72.699  62.847  1.00 12.80           N
ATOM   10703  N    LEU D 101      8.286  71.171  61.769  1.00 15.37           N
ATOM   10704  CA   LEU D 101      8.112  69.736  61.576  1.00 14.73           C
ATOM   10705  C    LEU D 101      6.725  69.131  61.801  1.00 15.27           C
ATOM   10706  O    LEU D 101      6.509  67.969  61.466  1.00 15.84           O
ATOM   10707  CB   LEU D 101      9.161  68.978  62.399  1.00 13.73           C
ATOM   10708  CG   LEU D 101     10.601  69.360  62.016  1.00 17.28           C
ATOM   10709  CD1  LEU D 101     11.603  68.717  62.965  1.00 15.71           C
ATOM   10710  CD2  LEU D 101     10.868  68.937  60.569  1.00 15.10           C
ATOM   10711  N    SER D 102      5.782  69.890  62.349  1.00 15.22           N
ATOM   10712  CA   SER D 102      4.435  69.345  62.545  1.00 15.91           C
ATOM   10713  C    SER D 102      3.657  69.454  61.236  1.00 14.88           C
ATOM   10714  O    SER D 102      2.647  68.784  61.052  1.00 13.41           O
ATOM   10715  CB   SER D 102      3.670  70.114  63.624  1.00 16.27           C
ATOM   10716  OG   SER D 102      3.192  71.353  63.113  1.00 18.86           O
ATOM   10717  N    GLY D 103      4.141  70.298  60.328  1.00 16.39           N
ATOM   10718  CA   GLY D 103      3.457  70.497  59.055  1.00 17.72           C
ATOM   10719  C    GLY D 103      2.265  71.450  59.173  1.00 18.20           C
ATOM   10720  O    GLY D 103      1.571  71.702  58.190  1.00 18.65           O
ATOM   10721  N    HIS D 104      2.030  71.981  60.373  1.00 16.75           N
ATOM   10722  CA   HIS D 104      0.918  72.900  60.604  1.00 16.91           C
ATOM   10723  C    HIS D 104      1.339  74.363  60.683  1.00 17.64           C
ATOM   10724  O    HIS D 104      2.510  74.687  60.875  1.00 17.81           O
ATOM   10725  CB   HIS D 104      0.176  72.541  61.901  1.00 16.36           C
ATOM   10726  CG   HIS D 104     -0.715  71.345  61.779  1.00 18.41           C
ATOM   10727  ND1  HIS D 104     -0.501  70.180  62.488  1.00 19.07           N
ATOM   10728  CD2  HIS D 104     -1.818  71.129  61.023  1.00 16.51           C
ATOM   10729  CE1  HIS D 104     -1.434  69.298  62.171  1.00 18.75           C
ATOM   10730  NE2  HIS D 104     -2.245  69.849  61.285  1.00 20.24           N
ATOM   10731  N    THR D 105      0.357  75.241  60.537  1.00 17.59           N
ATOM   10732  CA   THR D 105      0.588  76.671  60.620  1.00 17.79           C
ATOM   10733  C    THR D 105      0.252  77.052  62.051  1.00 18.42           C
ATOM   10734  O    THR D 105     -0.861  76.795  62.513  1.00 19.93           O
ATOM   10735  CB   THR D 105     -0.340  77.431  59.656  1.00 18.58           C
ATOM   10736  OG1  THR D 105     -0.004  77.085  58.308  1.00 17.51           O
ATOM   10737  CG2  THR D 105     -0.199  78.940  59.844  1.00 17.06           C
ATOM   10738  N    TYR D 106      1.205  77.654  62.756  1.00 17.32           N
ATOM   10739  CA   TYR D 106      0.976  78.036  64.149  1.00 18.32           C
ATOM   10740  C    TYR D 106      1.314  79.487  64.494  1.00 18.45           C
ATOM   10741  O    TYR D 106      2.164  80.112  63.857  1.00 17.64           O
ATOM   10742  CB   TYR D 106      1.827  77.178  65.091  1.00 16.74           C
ATOM   10743  CG   TYR D 106      1.498  75.709  65.180  1.00 18.40           C
ATOM   10744  CD1  TYR D 106      0.203  75.272  65.456  1.00 17.54           C
ATOM   10745  CD2  TYR D 106      2.514  74.752  65.090  1.00 19.23           C
ATOM   10746  CE1  TYR D 106     -0.073  73.918  65.652  1.00 19.33           C
ATOM   10747  CE2  TYR D 106      2.251  73.393  65.286  1.00 17.91           C
ATOM   10748  CZ   TYR D 106      0.957  72.982  65.568  1.00 18.07           C
ATOM   10749  OH   TYR D 106      0.700  71.642  65.768  1.00 14.35           O
ATOM   10750  N    PRO D 107      0.632  80.047  65.507  1.00 18.27           N
ATOM   10751  CA   PRO D 107      0.952  81.424  65.893  1.00 19.56           C
ATOM   10752  C    PRO D 107      2.256  81.246  66.684  1.00 19.80           C
ATOM   10753  O    PRO D 107      2.660  80.117  66.935  1.00 20.15           O
ATOM   10754  CB   PRO D 107     -0.234  81.833  66.766  1.00 17.95           C
ATOM   10755  CG   PRO D 107     -0.730  80.525  67.318  1.00 19.29           C
ATOM   10756  CD   PRO D 107     -0.623  79.599  66.135  1.00 17.40           C
ATOM   10757  N    ASP D 108      2.902  82.330  67.088  1.00 21.65           N
ATOM   10758  CA   ASP D 108      4.179  82.235  67.798  1.00 22.69           C
ATOM   10759  C    ASP D 108      4.078  81.921  69.296  1.00 23.38           C
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| ATOM | 10760 | O | ASP | D | 108 | 4.283 | 82.797 | 70.142 | 1.00 | 23.28 | O |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 10761 | CB | ASP | D | 108 | 4.952 | 83.536 | 67.581 | 1.00 | 23.71 | C |
| ATOM | 10762 | CG | ASP | D | 108 | 6.391 | 83.431 | 68.002 | 1.00 | 25.64 | C |
| ATOM | 10763 | OD1 | ASP | D | 108 | 6.895 | 82.289 | 68.093 | 1.00 | 27.23 | O |
| ATOM | 10764 | OD2 | ASP | D | 108 | 7.019 | 84.490 | 68.226 | 1.00 | 24.17 | O |
| ATOM | 10765 | N | GLN | D | 109 | 3.800 | 80.660 | 69.623 | 1.00 | 21.99 | N |
| ATOM | 10766 | CA | GLN | D | 109 | 3.645 | 80.274 | 71.020 | 1.00 | 23.46 | C |
| ATOM | 10767 | C | GLN | D | 109 | 4.310 | 78.961 | 71.442 | 1.00 | 22.39 | C |
| ATOM | 10768 | O | GLN | D | 109 | 3.846 | 78.302 | 72.372 | 1.00 | 21.84 | O |
| ATOM | 10769 | CB | GLN | D | 109 | 2.149 | 80.228 | 71.354 | 1.00 | 24.21 | C |
| ATOM | 10770 | CG | GLN | D | 109 | 1.427 | 81.542 | 71.050 | 1.00 | 24.96 | C |
| ATOM | 10771 | CD | GLN | D | 109 | -0.050 | 81.497 | 71.390 | 1.00 | 26.96 | C |
| ATOM | 10772 | OE1 | GLN | D | 109 | -0.433 | 81.199 | 72.523 | 1.00 | 27.00 | O |
| ATOM | 10773 | NE2 | GLN | D | 109 | -0.890 | 81.802 | 70.407 | 1.00 | 29.24 | N |
| ATOM | 10774 | N | SER | D | 110 | 5.398 | 78.596 | 70.770 | 1.00 | 21.21 | N |
| ATOM | 10775 | CA | SER | D | 110 | 6.126 | 77.365 | 71.076 | 1.00 | 20.77 | C |
| ATOM | 10776 | C | SER | D | 110 | 5.245 | 76.143 | 70.915 | 1.00 | 19.66 | C |
| ATOM | 10777 | O | SER | D | 110 | 5.279 | 75.243 | 71.749 | 1.00 | 20.29 | O |
| ATOM | 10778 | CB | SER | D | 110 | 6.676 | 77.390 | 72.507 | 1.00 | 20.35 | C |
| ATOM | 10779 | OG | SER | D | 110 | 7.805 | 78.233 | 72.616 | 1.00 | 22.26 | O |
| ATOM | 10780 | N | LEU | D | 111 | 4.466 | 76.104 | 69.839 | 1.00 | 19.49 | N |
| ATOM | 10781 | CA | LEU | D | 111 | 3.564 | 74.983 | 69.591 | 1.00 | 17.73 | C |
| ATOM | 10782 | C | LEU | D | 111 | 4.176 | 73.860 | 68.751 | 1.00 | 17.97 | C |
| ATOM | 10783 | O | LEU | D | 111 | 3.719 | 72.719 | 68.828 | 1.00 | 19.21 | O |
| ATOM | 10784 | CB | LEU | D | 111 | 2.277 | 75.482 | 68.905 | 1.00 | 16.64 | C |
| ATOM | 10785 | CG | LEU | D | 111 | 1.345 | 76.401 | 69.701 | 1.00 | 16.31 | C |
| ATOM | 10786 | CD1 | LEU | D | 111 | 0.234 | 76.916 | 68.808 | 1.00 | 17.50 | C |
| ATOM | 10787 | CD2 | LEU | D | 111 | 0.761 | 75.645 | 70.878 | 1.00 | 15.54 | C |
| ATOM | 10788 | N | TYR | D | 112 | 5.202 | 74.184 | 67.961 | 1.00 | 17.18 | N |
| ATOM | 10789 | CA | TYR | D | 112 | 5.861 | 73.216 | 67.079 | 1.00 | 17.36 | C |
| ATOM | 10790 | C | TYR | D | 112 | 6.922 | 72.328 | 67.743 | 1.00 | 16.48 | C |
| ATOM | 10791 | O | TYR | D | 112 | 7.409 | 72.632 | 68.832 | 1.00 | 16.55 | O |
| ATOM | 10792 | CB | TYR | D | 112 | 6.481 | 73.949 | 65.873 | 1.00 | 16.74 | C |
| ATOM | 10793 | CG | TYR | D | 112 | 7.548 | 74.967 | 66.227 | 1.00 | 18.37 | C |
| ATOM | 10794 | CD1 | TYR | D | 112 | 8.805 | 74.562 | 66.668 | 1.00 | 17.05 | C |
| ATOM | 10795 | CD2 | TYR | D | 112 | 7.306 | 76.340 | 66.102 | 1.00 | 18.31 | C |
| ATOM | 10796 | CE1 | TYR | D | 112 | 9.798 | 75.487 | 66.971 | 1.00 | 16.92 | C |
| ATOM | 10797 | CE2 | TYR | D | 112 | 8.298 | 77.280 | 66.410 | 1.00 | 17.40 | C |
| ATOM | 10798 | CZ | TYR | D | 112 | 9.538 | 76.841 | 66.840 | 1.00 | 17.56 | C |
| ATOM | 10799 | OH | TYR | D | 112 | 10.529 | 77.743 | 67.128 | 1.00 | 18.38 | O |
| ATOM | 10800 | N | PRO | D | 113 | 7.299 | 71.218 | 67.081 | 1.00 | 16.02 | N |
| ATOM | 10801 | CA | PRO | D | 113 | 8.306 | 70.300 | 67.630 | 1.00 | 16.49 | C |
| ATOM | 10802 | C | PRO | D | 113 | 9.662 | 70.984 | 67.849 | 1.00 | 17.94 | C |
| ATOM | 10803 | O | PRO | D | 113 | 10.180 | 71.677 | 66.966 | 1.00 | 16.66 | O |
| ATOM | 10804 | CB | PRO | D | 113 | 8.365 | 69.185 | 66.586 | 1.00 | 16.41 | C |
| ATOM | 10805 | CG | PRO | D | 113 | 6.981 | 69.214 | 65.978 | 1.00 | 16.92 | C |
| ATOM | 10806 | CD | PRO | D | 113 | 6.760 | 70.698 | 65.813 | 1.00 | 14.68 | C |
| ATOM | 10807 | N | ALA | D | 114 | 10.216 | 70.767 | 69.039 | 1.00 | 18.02 | N |
| ATOM | 10808 | CA | ALA | D | 114 | 11.479 | 71.360 | 69.480 | 1.00 | 16.83 | C |
| ATOM | 10809 | C | ALA | D | 114 | 12.674 | 71.291 | 68.545 | 1.00 | 15.77 | C |
| ATOM | 10810 | O | ALA | D | 114 | 13.572 | 72.116 | 68.649 | 1.00 | 15.54 | O |
| ATOM | 10811 | CB | ALA | D | 114 | 11.868 | 70.776 | 70.840 | 1.00 | 16.24 | C |
| ATOM | 10812 | N | ASN | D | 115 | 12.711 | 70.315 | 67.647 | 1.00 | 15.78 | N |
| ATOM | 10813 | CA | ASN | D | 115 | 13.846 | 70.213 | 66.734 | 1.00 | 16.72 | C |
| ATOM | 10814 | C | ASN | D | 115 | 13.576 | 70.868 | 65.385 | 1.00 | 15.64 | C |
| ATOM | 10815 | O | ASN | D | 115 | 14.304 | 70.638 | 64.426 | 1.00 | 16.32 | O |
| ATOM | 10816 | CB | ASN | D | 115 | 14.250 | 68.738 | 66.544 | 1.00 | 17.60 | C |
| ATOM | 10817 | CG | ASN | D | 115 | 13.139 | 67.896 | 65.953 | 1.00 | 18.00 | C |
| ATOM | 10818 | OD1 | ASN | D | 115 | 11.968 | 68.087 | 66.274 | 1.00 | 17.98 | O |
| ATOM | 10819 | ND2 | ASN | D | 115 | 13.504 | 66.946 | 65.098 | 1.00 | 17.01 | N |
| ATOM | 10820 | N | SER | D | 116 | 12.542 | 71.703 | 65.321 | 1.00 | 16.84 | N |
| ATOM | 10821 | CA | SER | D | 116 | 12.183 | 72.379 | 64.075 | 1.00 | 15.77 | C |
| ATOM | 10822 | C | SER | D | 116 | 13.219 | 73.386 | 63.610 | 1.00 | 15.99 | C |
| ATOM | 10823 | O | SER | D | 116 | 13.643 | 73.350 | 62.457 | 1.00 | 17.20 | O |
| ATOM | 10824 | CB | SER | D | 116 | 10.828 | 73.078 | 64.208 | 1.00 | 13.97 | C |
| ATOM | 10825 | OG | SER | D | 116 | 9.770 | 72.140 | 64.166 | 1.00 | 17.42 | O |
| ATOM | 10826 | N | VAL | D | 117 | 13.623 | 74.295 | 64.494 | 1.00 | 16.56 | N |
| ATOM | 10827 | CA | VAL | D | 117 | 14.608 | 75.300 | 64.115 | 1.00 | 16.01 | C |
| ATOM | 10828 | C | VAL | D | 117 | 15.932 | 74.653 | 63.722 | 1.00 | 16.26 | C |
| ATOM | 10829 | O | VAL | D | 117 | 16.545 | 75.054 | 62.739 | 1.00 | 18.50 | O |
| ATOM | 10830 | CB | VAL | D | 117 | 14.829 | 76.332 | 65.238 | 1.00 | 16.22 | C |
| ATOM | 10831 | CG1 | VAL | D | 117 | 15.957 | 77.288 | 64.855 | 1.00 | 15.00 | C |
| ATOM | 10832 | CG2 | VAL | D | 117 | 13.549 | 77.119 | 65.462 | 1.00 | 17.14 | C |
| ATOM | 10833 | N | PRO | D | 118 | 16.397 | 73.648 | 64.487 | 1.00 | 16.02 | N |
| ATOM | 10834 | CA | PRO | D | 118 | 17.663 | 72.987 | 64.137 | 1.00 | 17.62 | C |
| ATOM | 10835 | C | PRO | D | 118 | 17.634 | 72.460 | 62.701 | 1.00 | 18.86 | C |
| ATOM | 10836 | O | PRO | D | 118 | 18.616 | 72.578 | 61.956 | 1.00 | 18.51 | O |
| ATOM | 10837 | CB | PRO | D | 118 | 17.760 | 71.868 | 65.164 | 1.00 | 17.66 | C |
| ATOM | 10838 | CG | PRO | D | 118 | 17.163 | 72.523 | 66.387 | 1.00 | 19.05 | C |
| ATOM | 10839 | CD | PRO | D | 118 | 15.928 | 73.211 | 65.815 | 1.00 | 16.01 | C |

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ATOM  10840  N   GLN D 119      16.500  71.882  62.314  1.00 19.00           N
ATOM  10841  CA  GLN D 119      16.340  71.359  60.960  1.00 20.38           C
ATOM  10842  C   GLN D 119      16.470  72.481  59.932  1.00 18.29           C
ATOM  10843  O   GLN D 119      17.078  72.298  58.875  1.00 16.35           O
ATOM  10844  CB  GLN D 119      14.976  70.683  60.804  1.00 23.48           C
ATOM  10845  CG  GLN D 119      14.915  69.267  61.352  1.00 29.15           C·
ATOM  10846  CD  GLN D 119      15.835  68.320  60.600  1.00 32.74           C
ATOM  10847  OE1 GLN D 119      17.021  68.204  60.918  1.00 34.07           O
ATOM  10848  NE2 GLN D 119      15.293  67.651  59.582  1.00 33.26           N
ATOM  10849  N   VAL D 120      15.900  73.644  60.239  1.00 16.98           N
ATOM  10850  CA  VAL D 120      15.976  74.773  59.311  1.00 17.21           C
ATOM  10851  C   VAL D 120      17.400  75.351  59.254  1.00 16.57           C
ATOM  10852  O   VAL D 120      17.837  75.826  58.209  1.00 17.50           O
ATOM  10853  CB  VAL D 120      14.951  75.871  59.676  1.00 14.56           C
ATOM  10854  CG1 VAL D 120      15.130  77.077  58.773  1.00 15.82           C
ATOM  10855  CG2 VAL D 120      13.528  75.316  59.513  1.00 13.93           C
ATOM  10856  N   VAL D 121      18.122  75.305  60.369  1.00 16.24           N
ATOM  10857  CA  VAL D 121      19.499  75.783  60.381  1.00 14.82           C
ATOM  10858  C   VAL D 121      20.281  74.870  59.425  1.00 16.65           C
ATOM  10859  O   VAL D 121      21.035  75.346  58.577  1.00 16.29           O
ATOM  10860  CB  VAL D 121      20.110  75.695  61.797  1.00 16.32           C
ATOM  10861  CG1 VAL D 121      21.615  75.994  61.753  1.00 14.53           C·
ATOM  10862  CG2 VAL D 121      19.408  76.678  62.721  1.00 15.37           C
ATOM  10863  N   ARG D 122      20.083  73.557  59.558  1.00 16.20           N
ATOM  10864  CA  ARG D 122      20.755  72.583  58.695  1.00 17.24           C
ATOM  10865  C   ARG D 122      20.384  72.828  57.240  1.00 17.18           C
ATOM  10866  O   ARG D 122      21.233  72.761  56.348  1.00 18.13           O
ATOM  10867  CB  ARG D 122      20.351  71.152  59.078  1.00 16.40           C
ATOM  10868  CG  ARG D 122      21.013  70.053  58.246  1.00 16.85           C
ATOM  10869  CD  ARG D 122      22.536  69.976  58.456  1.00 16.81           C
ATOM  10870  NE  ARG D 122      23.286  70.704  57.432  1.00 17.64           N
ATOM  10871  CZ  ARG D 122      24.616  70.772  57.378  1.00 17.24           C
ATOM  10872  NH1 ARG D 122      25.354  70.162  58.295  1.00 15.63           N
ATOM  10873  NH2 ARG D 122      25.211  71.437  56.393  1.00 14.74           N
ATOM  10874  N   ARG D 123      19.107  73.099  57.002  1.00 16.20           N
ATOM  10875  CA  ARG D 123      18.636  73.357  55.648  1.00 16.72           C
ATOM  10876  C   ARG D 123      19.309  74.603  55.074  1.00 17.49           C
ATOM  10877  O   ARG D 123      19.818  74.591  53.952  1.00 18.44           O
ATOM  10878  CB  ARG D 123      17.115  73.526  55.647  1.00 17.27           C
ATOM  10879  CG  ARG D 123      16.552  74.129  54.376  1.00 18.32           C
ATOM  10880  CD  ARG D 123      17.036  73.394  53.132  1.00 19.43           C
ATOM  10881  NE  ARG D 123      16.698  74.144  51.923  1.00 19.45           N
ATOM  10882  CZ  ARG D 123      17.393  74.095  50.792  1.00 16.21           C
ATOM  10883  NH1 ARG D 123      18.472  73.333  50.704  1.00 14.92           N
ATOM  10884  NH2 ARG D 123      17.012  74.819  49.748  1.00 17.44           N
ATOM  10885  N   ILE D 124      19.311  75.679  55.852  1.00 17.61           N
ATOM  10886  CA  ILE D 124      19.932  76.911  55.409  1.00 18.44           C
ATOM  10887  C   ILE D 124      21.421  76.713  55.102  1.00 18.28           C
ATOM  10888  O   ILE D 124      21.899  77.205  54.087  1.00 21.36           O
ATOM  10889  CB  ILE D 124      19.714  78.042  56.456  1.00 18.77           C
ATOM  10890  CG1 ILE D 124      18.242  78.468  56.425  1.00 18.76           C
ATOM  10891  CG2 ILE D 124      20.626  79.239  56.161  1.00 16.22           C
ATOM  10892  CD1 ILE D 124      17.885  79.546  57.416  1.00 22.91           C
ATOM  10893  N   ASN D 125      22.153  75.993  55.955  1.00 18.26           N
ATOM  10894  CA  ASN D 125      23.575  75.751  55.692  1.00 18.93           C
ATOM  10895  C   ASN D 125      23.768  74.884  54.445  1.00 19.68           C
ATOM  10896  O   ASN D 125      24.734  75.063  53.706  1.00 20.48           O
ATOM  10897  CB  ASN D 125      24.267  75.084  56.890  1.00 18.44           C
ATOM  10898  CG  ASN D 125      24.778  76.093  57.911  1.00 20.01           C
ATOM  10899  OD1 ASN D 125      25.237  77.182  57.551  1.00 16.78           O
ATOM  10900  ND2 ASN D 125      24.717  75.727  59.190  1.00 18.42           N
ATOM  10901  N   ASN D 126      22.860  73.940  54.206  1.00 19.57           N
ATOM  10902  CA  ASN D 126      22.983  73.112  53.012  1.00 19.33           C
ATOM  10903  C   ASN D 126      22.788  73.975  51.765  1.00 19.53           C
ATOM  10904  O   ASN D 126      23.522  73.833  50.784  1.00 19.58           O
ATOM  10905  CB  ASN D 126      21.955  71.978  53.003  1.00 17.86           C
ATOM  10906  CG  ASN D 126      22.227  70.926  54.068  1.00 19.79           C
ATOM  10907  OD1 ASN D 126      23.377  70.678  54.441  1.00 17.81           O
ATOM  10908  ND2 ASN D 126      21.164  70.284  54.549  1.00 18.00           N
ATOM  10909  N   ALA D 127      21.807  74.873  51.805  1.00 18.03           N
ATOM  10910  CA  ALA D 127      21.534  75.740  50.659  1.00 19.15           C
ATOM  10911  C   ALA D 127      22.731  76.635  50.355  1.00 18.40           C
ATOM  10912  O   ALA D 127      23.116  76.805  49.195  1.00 18.81           O
ATOM  10913  CB  ALA D 127      20.299  76.587  50.918  1.00 17.05           C
ATOM  10914  N   LEU D 128      23.315  77.200  51.407  1.00 18.89           N
ATOM  10915  CA  LEU D 128      24.485  78.066  51.275  1.00 19.27           C
ATOM  10916  C   LEU D 128      25.689  77.277  50.762  1.00 19.70           C
ATOM  10917  O   LEU D 128      26.502  77.797  49.993  1.00 18.88           O
ATOM  10918  CB  LEU D 128      24.828  78.699  52.630  1.00 18.83           C
ATOM  10919  CG  LEU D 128      23.775  79.622  53.237  1.00 16.61           C
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| ATOM | 10920 | CD1 | LEU | D | 128 | 24.215 | 80.043 | 54.631 | 1.00 | 17.21 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 10921 | CD2 | LEU | D | 128 | 23.578 | 80.830 | 52.338 | 1.00 | 16.67 | C |
| ATOM | 10922 | N | GLN | D | 129 | 25.810 | 76.023 | 51.191 | 1.00 | 20.09 | N |
| ATOM | 10923 | CA | GLN | D | 129 | 26.920 | 75.192 | 50.741 | 1.00 | 19.94 | C |
| ATOM | 10924 | C | GLN | D | 129 | 26.799 | 74.890 | 49.258 | 1.00 | 21.09 | C |
| ATOM | 10925 | O | GLN | D | 129 | 27.812 | 74.778 | 48.557 | 1.00 | 21.55 | O |
| ATOM | 10926 | CB | GLN | D | 129 | 26.971 | 73.879 | 51.516 | 1.00 | 20.46 | C |
| ATOM | 10927 | CG | GLN | D | 129 | 27.553 | 74.009 | 52.912 | 1.00 | 24.01 | C |
| ATOM | 10928 | CD | GLN | D | 129 | 27.485 | 72.709 | 53.681 | 1.00 | 23.15 | C |
| ATOM | 10929 | OE1 | GLN | D | 129 | 26.399 | 72.165 | 53.895 | 1.00 | 25.75 | O |
| ATOM | 10930 | NE2 | GLN | D | 129 | 28.641 | 72.202 | 54.104 | 1.00 | 19.18 | N |
| ATOM | 10931 | N | ARG | D | 130 | 25.566 | 74.745 | 48.777 | 1.00 | 20.37 | N |
| ATOM | 10932 | CA | ARG | D | 130 | 25.365 | 74.459 | 47.361 | 1.00 | 20.56 | C |
| ATOM | 10933 | C | ARG | D | 130 | 25.790 | 75.695 | 46.573 | 1.00 | 20.91 | C |
| ATOM | 10934 | O | ARG | D | 130 | 26.528 | 75.592 | 45.597 | 1.00 | 23.00 | O |
| ATOM | 10935 | CB | ARG | D | 130 | 23.895 | 74.128 | 47.059 | 1.00 | 18.32 | C |
| ATOM | 10936 | CG | ARG | D | 130 | 23.658 | 73.615 | 45.626 | 1.00 | 18.58 | C |
| ATOM | 10937 | CD | ARG | D | 130 | 24.274 | 72.223 | 45.412 | 1.00 | 17.07 | C |
| ATOM | 10938 | NE | ARG | D | 130 | 23.473 | 71.175 | 46.041 | 1.00 | 18.16 | N |
| ATOM | 10939 | CZ | ARG | D | 130 | 23.947 | 70.003 | 46.458 | 1.00 | 18.89 | C |
| ATOM | 10940 | NH1 | ARG | D | 130 | 25.233 | 69.708 | 46.326 | 1.00 | 20.25 | N |
| ATOM | 10941 | NH2 | ARG | D | 130 | 23.129 | 69.116 | 47.005 | 1.00 | 15.60 | N |
| ATOM | 10942 | N | ALA | D | 131 | 25.331 | 76.862 | 47.012 | 1.00 | 21.21 | N |
| ATOM | 10943 | CA | ALA | D | 131 | 25.671 | 78.111 | 46.334 | 1.00 | 22.68 | C |
| ATOM | 10944 | C | ALA | D | 131 | 27.179 | 78.302 | 46.303 | 1.00 | 22.69 | C |
| ATOM | 10945 | O | ALA | D | 131 | 27.726 | 78.840 | 45.342 | 1.00 | 24.51 | O |
| ATOM | 10946 | CB | ALA | D | 131 | 25.004 | 79.293 | 47.036 | 1.00 | 22.29 | C |
| ATOM | 10947 | N | ASP | D | 132 | 27.844 | 77.856 | 47.363 | 1.00 | 23.42 | N |
| ATOM | 10948 | CA | ASP | D | 132 | 29.293 | 77.956 | 47.469 | 1.00 | 22.48 | C |
| ATOM | 10949 | C | ASP | D | 132 | 29.916 | 77.018 | 46.440 | 1.00 | 23.52 | C |
| ATOM | 10950 | O | ASP | D | 132 | 30.855 | 77.384 | 45.728 | 1.00 | 23.88 | O |
| ATOM | 10951 | CB | ASP | D | 132 | 29.743 | 77.564 | 48.879 | 1.00 | 21.68 | C |
| ATOM | 10952 | CG | ASP | D | 132 | 31.248 | 77.660 | 49.067 | 1.00 | 23.95 | C |
| ATOM | 10953 | OD1 | ASP | D | 132 | 31.807 | 78.767 | 48.916 | 1.00 | 23.82 | O |
| ATOM | 10954 | OD2 | ASP | D | 132 | 31.876 | 76.625 | 49.377 | 1.00 | 26.43 | O |
| ATOM | 10955 | N | GLN | D | 133 | 29.384 | 75.804 | 46.367 | 1.00 | 23.84 | N |
| ATOM | 10956 | CA | GLN | D | 133 | 29.874 | 74.810 | 45.423 | 1.00 | 23.04 | C |
| ATOM | 10957 | C | GLN | D | 133 | 29.707 | 75.300 | 43.987 | 1.00 | 23.13 | C |
| ATOM | 10958 | O | GLN | D | 133 | 30.640 | 75.235 | 43.188 | 1.00 | 22.86 | O |
| ATOM | 10959 | CB | GLN | D | 133 | 29.110 | 73.498 | 45.608 | 1.00 | 22.78 | C |
| ATOM | 10960 | CG | GLN | D | 133 | 29.440 | 72.783 | 46.891 | 1.00 | 20.57 | C |
| ATOM | 10961 | CD | GLN | D | 133 | 28.313 | 71.893 | 47.376 | 1.00 | 22.22 | C |
| ATOM | 10962 | OE1 | GLN | D | 133 | 28.424 | 71.261 | 48.425 | 1.00 | 22.61 | O |
| ATOM | 10963 | NE2 | GLN | D | 133 | 27.219 | 71.843 | 46.622 | 1.00 | 23.17 | N |
| ATOM | 10964 | N | ILE | D | 134 | 28.508 | 75.781 | 43.671 | 1.00 | 23.67 | N |
| ATOM | 10965 | CA | ILE | D | 134 | 28.201 | 76.278 | 42.340 | 1.00 | 24.50 | C |
| ATOM | 10966 | C | ILE | D | 134 | 29.113 | 77.448 | 42.001 | 1.00 | 27.09 | C |
| ATOM | 10967 | O | ILE | D | 134 | 29.660 | 77.511 | 40.902 | 1.00 | 27.25 | O |
| ATOM | 10968 | CB | ILE | D | 134 | 26.735 | 76.770 | 42.239 | 1.00 | 25.13 | C |
| ATOM | 10969 | CG1 | ILE | D | 134 | 25.769 | 75.611 | 42.483 | 1.00 | 22.85 | C |
| ATOM | 10970 | CG2 | ILE | D | 134 | 26.480 | 77.396 | 40.858 | 1.00 | 21.99 | C |
| ATOM | 10971 | CD1 | ILE | D | 134 | 24.323 | 76.057 | 42.567 | 1.00 | 19.89 | C |
| ATOM | 10972 | N | ALA | D | 135 | 29.266 | 78.377 | 42.943 | 1.00 | 28.64 | N |
| ATOM | 10973 | CA | ALA | D | 135 | 30.111 | 79.546 | 42.719 | 1.00 | 30.22 | C |
| ATOM | 10974 | C | ALA | D | 135 | 31.538 | 79.139 | 42.374 | 1.00 | 31.16 | C |
| ATOM | 10975 | O | ALA | D | 135 | 32.166 | 79.745 | 41.504 | 1.00 | 32.35 | O |
| ATOM | 10976 | CB | ALA | D | 135 | 30.109 | 80.451 | 43.949 | 1.00 | 29.81 | C |
| ATOM | 10977 | N | LYS | D | 136 | 32.043 | 78.108 | 43.045 | 1.00 | 30.42 | N |
| ATOM | 10978 | CA | LYS | D | 136 | 33.401 | 77.644 | 42.799 | 1.00 | 30.69 | C |
| ATOM | 10979 | C | LYS | D | 136 | 33.589 | 77.135 | 41.371 | 1.00 | 32.02 | C |
| ATOM | 10980 | O | LYS | D | 136 | 34.545 | 77.513 | 40.701 | 1.00 | 32.28 | O |
| ATOM | 10981 | CB | LYS | D | 136 | 33.776 | 76.545 | 43.794 | 1.00 | 30.19 | C |
| ATOM | 10982 | CG | LYS | D | 136 | 35.256 | 76.181 | 43.781 | 1.00 | 31.51 | C |
| ATOM | 10983 | CD | LYS | D | 136 | 35.593 | 75.120 | 44.831 | 1.00 | 31.52 | C |
| ATOM | 10984 | CE | LYS | D | 136 | 37.096 | 74.851 | 44.901 | 1.00 | 30.67 | C |
| ATOM | 10985 | NZ | LYS | D | 136 | 37.447 | 73.893 | 45.993 | 1.00 | 31.51 | N |
| ATOM | 10986 | N | ILE | D | 137 | 32.681 | 76.286 | 40.894 | 1.00 | 33.15 | N |
| ATOM | 10987 | CA | ILE | D | 137 | 32.816 | 75.754 | 39.539 | 1.00 | 32.19 | C |
| ATOM | 10988 | C | ILE | D | 137 | 32.507 | 76.802 | 38.473 | 1.00 | 33.14 | C |
| ATOM | 10989 | O | ILE | D | 137 | 32.899 | 76.651 | 37.315 | 1.00 | 32.98 | O |
| ATOM | 10990 | CB | ILE | D | 137 | 31.900 | 74.532 | 39.296 | 1.00 | 33.05 | C |
| ATOM | 10991 | CG1 | ILE | D | 137 | 30.429 | 74.947 | 39.388 | 1.00 | 33.22 | C |
| ATOM | 10992 | CG2 | ILE | D | 137 | 32.223 | 73.425 | 40.295 | 1.00 | 31.77 | C |
| ATOM | 10993 | CD1 | ILE | D | 137 | 29.467 | 73.851 | 38.961 | 1.00 | 33.13 | C |
| ATOM | 10994 | N | GLU | D | 138 | 31.799 | 77.860 | 38.852 | 1.00 | 31.51 | N |
| ATOM | 10995 | CA | GLU | D | 138 | 31.481 | 78.903 | 37.891 | 1.00 | 32.41 | C |
| ATOM | 10996 | C | GLU | D | 138 | 32.542 | 79.998 | 37.924 | 1.00 | 33.13 | C |
| ATOM | 10997 | O | GLU | D | 138 | 32.526 | 80.911 | 37.101 | 1.00 | 33.61 | O |
| ATOM | 10998 | CB | GLU | D | 138 | 30.104 | 79.509 | 38.176 | 1.00 | 31.60 | C |
| ATOM | 10999 | CG | GLU | D | 138 | 28.962 | 78.512 | 38.082 | 1.00 | 32.28 | C |

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ATOM   11000  CD  GLU D 138      27.599  79.179  38.047  1.00 33.34           C
ATOM   11001  OE1 GLU D 138      27.346  80.089  38.869  1.00 31.66           O
ATOM   11002  OE2 GLU D 138      26.774  78.782  37.193  1.00 34.63           O
ATOM   11003  N   GLY D 139      33.472  79.890  38.867  1.00 33.57           N
ATOM   11004  CA  GLY D 139      34.514  80.891  38.986  1.00 34.33           C
ATOM   11005  C   GLY D 139      33.909  82.210  39.422  1.00 35.65           C
ATOM   11006  O   GLY D 139      34.409  83.284  39.087  1.00 36.53           O
ATOM   11007  N   ASP D 140      32.817  82.128  40.174  1.00 36.01           N
ATOM   11008  CA  ASP D 140      32.130  83.315  40.658  1.00 35.64           C
ATOM   11009  C   ASP D 140      32.625  83.744  42.039  1.00 36.40           C
ATOM   11010  O   ASP D 140      32.335  83.097  43.049  1.00 35.18           O
ATOM   11011  CB  ASP D 140      30.623  83.055  40.688  1.00 36.24           C
ATOM   11012  CG  ASP D 140      29.848  84.186  41.322  1.00 36.13           C
ATOM   11013  OD1 ASP D 140      30.430  85.273  41.507  1.00 37.52           O
ATOM   11014  OD2 ASP D 140      28.653  83.993  41.627  1.00 36.53           O
ATOM   11015  N   THR D 141      33.376  84.844  42.068  1.00 36.60           N
ATOM   11016  CA  THR D 141      33.923  85.384  43.307  1.00 37.34           C
ATOM   11017  C   THR D 141      33.069  86.531  43.833  1.00 37.02           C
ATOM   11018  O   THR D 141      33.494  87.291  44.706  1.00 37.21           O
ATOM   11019  CB  THR D 141      35.365  85.898  43.107  1.00 39.09           C
ATOM   11020  OG1 THR D 141      35.391  86.855  42.038  1.00 41.41           O
ATOM   11021  CG2 THR D 141      36.301  84.740  42.781  1.00 38.80           C
ATOM   11022  N   SER D 142      31.859  86.643  43.293  1.00 36.90           N
ATOM   11023  CA  SER D 142      30.912  87.682  43.687  1.00 36.42           C
ATOM   11024  C   SER D 142      30.765  87.762  45.208  1.00 35.35           C
ATOM   11025  O   SER D 142      30.730  88.847  45.788  1.00 33.31           O
ATOM   11026  CB  SER D 142      29.550  87.397  43.042  1.00 37.03           C
ATOM   11027  OG  SER D 142      28.542  88.270  43.525  1.00 42.05           O
ATOM   11028  N   VAL D 143      30.687  86.600  45.845  1.00 34.73           N
ATOM   11029  CA  VAL D 143      30.536  86.523  47.291  1.00 33.24           C
ATOM   11030  C   VAL D 143      31.796  85.972  47.946  1.00 33.13           C
ATOM   11031  O   VAL D 143      32.285  84.902  47.589  1.00 34.10           O
ATOM   11032  CB  VAL D 143      29.343  85.628  47.666  1.00 32.86           C
ATOM   11033  CG1 VAL D 143      29.211  85.539  49.181  1.00 34.03           C
ATOM   11034  CG2 VAL D 143      28.071  86.183  47.047  1.00 32.84           C
ATOM   11035  N   GLU D 144      32.316  86.711  48.912  1.00 33.32           N
ATOM   11036  CA  GLU D 144      33.521  86.306  49.618  1.00 34.94           C
ATOM   11037  C   GLU D 144      33.232  85.124  50.535  1.00 32.89           C
ATOM   11038  O   GLU D 144      33.963  84.134  50.536  1.00 33.82           O
ATOM   11039  CB  GLU D 144      34.066  87.478  50.440  1.00 38.62           C
ATOM   11040  CG  GLU D.144      33.179  87.866  51.613  1.00 45.66           C
ATOM   11041  CD  GLU D 144      31.749  88.187  51.197  1.00 49.12           C
ATOM   11042  OE1 GLU D 144      30.831  87.972  52.025  1.00 50.55           O
ATOM   11043  OE2 GLU D 144      31.545  88.662  50.053  1.00 49.60           O
ATOM   11044  N   ASN D 145      32.156  85.223  51.309  1.00 30.34           N
ATOM   11045  CA  ASN D 145      31.792  84.159  52.237  1.00 27.39           C
ATOM   11046  C   ASN D 145      30.336  83.737  52.091  1.00 24.79           C
ATOM   11047  O   ASN D 145      29.439  84.417  52.589  1.00 23.15           O
ATOM   11048  CB  ASN D 145      32.030  84.622  53.678  1.00 27.38           C
ATOM   11049  CG  ASN D 145      31.624  83.580  54.701  1.00 27.26           C
ATOM   11050  OD1 ASN D 145      30.985  83.899  55.708  1.00 28.08           O
ATOM   11051  ND2 ASN D 145      32.002  82.328  54.457  1.00 26.50           N
ATOM   11052  N   TRP D 146      30.101  82.611  51.427  1.00 22.17           N
ATOM   11053  CA  TRP D 146      28.736  82.120  51.256  1.00 22.29           C
ATOM   11054  C   TRP D 146      28.167  81.589  52.566  1.00 22.68           C
ATOM   11055  O   TRP D 146      26.956  81.636  52.791  1.00 22.79           O
ATOM   11056  CB  TRP D 146      28.687  81.012  50.206  1.00 21.54           C
ATOM   11057  CG  TRP D 146      28.628  81.542  48.841  1.00 19.82           C
ATOM   11058  CD1 TRP D 146      29.659  81.655  47.958  1.00 18.90           C
ATOM   11059  CD2 TRP D 146      27.477  82.098  48.199  1.00 20.74           C
ATOM   11060  NE1 TRP D 146      29.221  82.252  46.798  1.00 22.38           N
ATOM   11061  CE2 TRP D 146      27.885  82.535  46.919  1.00 20.69           C
ATOM   11062  CE3 TRP D 146      26.141  82.271  48.582  1.00 18.52           C
ATOM   11063  CZ2 TRP D 146      27.002  83.138  46.017  1.00 20.83           C
ATOM   11064  CZ3 TRP D 146      25.262  82.871  47.687  1.00 20.24           C
ATOM   11065  CH2 TRP D 146      25.697  83.298  46.419  1.00 20.99           C
ATOM   11066  N   LEU D 147      29.050  81.083  53.422  1.00 21.09           N
ATOM   11067  CA  LEU D 147      28.647  80.539  54.706  1.00 21.64           C
ATOM   11068  C   LEU D 147      28.527  81.613  55.784  1.00 21.99           C
ATOM   11069  O   LEU D 147      29.323  81.668  56.724  1.00 20.11           O
ATOM   11070  CB  LEU D 147      29.635  79.454  55.134  1.00 22.62           C
ATOM   11071  CG  LEU D 147      29.463  78.181  54.302  1.00 25.08           C
ATOM   11072  CD1 LEU D 147      30.636  77.246  54.504  1.00 27.89           C
ATOM   11073  CD2 LEU D 147      28.156  77.505  54.710  1.00 27.47           C
ATOM   11074  N   ALA D 148      27.517  82.465  55.630  1.00 22.50           N
ATOM   11075  CA  ALA D 148      27.246  83.542  56.576  1.00 22.16           C
ATOM   11076  C   ALA D 148      26.738  82.942  57.883  1.00 23.08           C
ATOM   11077  O   ALA D 148      25.937  82.008  57.876  1.00 24.09           O
ATOM   11078  CB  ALA D 148      26.202  84.489  55.999  1.00 21.93           C
ATOM   11079  N   PRO D 149      27.199  83.471  59.026  1.00 23.28           N
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ATOM   11080  CA   PRO D 149    26.755  82.946  60.321  1.00 21.62        C
ATOM   11081  C    PRO D 149    25.238  83.012  60.483  1.00 21.45        C
ATOM   11082  O    PRO D 149    24.588  83.930  59.988  1.00 22.62        O
ATOM   11083  CB   PRO D 149    27.496  83.826  61.323  1.00 22.41        C
ATOM   11084  CG   PRO D 149    27.646  85.135  60.572  1.00 23.29        C
ATOM   11085  CD   PRO D 149    28.045  84.666  59.199  1.00 23.16        C
ATOM   11086  N    ILE D 150    24.681  82.030  61.184  1.00 20.28        N
ATOM   11087  CA   ILE D 150    23.244  81.965  61.399  1.00 18.73        C
ATOM   11088  C    ILE D 150    22.890  82.189  62.860  1.00 17.49        C
ATOM   11089  O    ILE D 150    23.438  81.544  63.746  1.00 19.41        O
ATOM   11090  CB   ILE D 150    22.686  80.581  60.988  1.00 18.50        C
ATOM   11091  CG1  ILE D 150    23.076  80.269  59.541  1.00 18.73        C
ATOM   11092  CG2  ILE D 150    21.172  80.554  61.177  1.00 17.77        C
ATOM   11093  CD1  ILE D 150    22.756  78.842  59.102  1.00 17.28        C
ATOM   11094  N    VAL D 151    21.970  83.105  63.111  1.00 18.29        N
ATOM   11095  CA   VAL D 151    21.528  83.361  64.474  1.00 18.82        C
ATOM   11096  C    VAL D 151    20.125  82.787  64.574  1.00 17.86        C
ATOM   11097  O    VAL D 151    19.200  83.283  63.933  1.00 16.85        O
ATOM   11098  CB   VAL D 151    21.497  84.868  64.788  1.00 18.78        C
ATOM   11099  CG1  VAL D 151    20.872  85.100  66.165  1.00 16.68        C
ATOM   11100  CG2  VAL D 151    22.914  85.423  64.749  1.00 17.98        C
ATOM   11101  N    ALA D 152    19.975  81.744  65.384  1.00 18.01        N
ATOM   11102  CA   ALA D 152    18.690  81.073  65.529  1.00 17.50        C
ATOM   11103  C    ALA D 152    17.949  81.324  66.828  1.00 15.86        C
ATOM   11104  O    ALA D 152    18.548  81.562  67.877  1.00 13.82        O
ATOM   11105  CB   ALA D 152    18.867  79.576  65.324  1.00 17.30        C
ATOM   11106  N    ASP D 153    16.629  81.229  66.721  1.00 15.68        N
ATOM   11107  CA   ASP D 153    15.691  81.437  67.811  1.00 17.62        C
ATOM   11108  C    ASP D 153    15.566  80.168  68.663  1.00 18.05        C
ATOM   11109  O    ASP D 153    15.094  79.141  68.185  1.00 17.88        O
ATOM   11110  CB   ASP D 153    14.328  81.796  67.209  1.00 18.94        C
ATOM   11111  CG   ASP D 153    13.324  82.271  68.241  1.00 18.77        C
ATOM   11112  OD1  ASP D 153    13.523  82.018  69.450  1.00 20.06        O
ATOM   11113  OD2  ASP D 153    12.323  82.892  67.831  1.00 18.07        O
ATOM   11114  N    GLY D 154    15.997  80.245  69.916  1.00 17.87        N
ATOM   11115  CA   GLY D 154    15.902  79.101  70.802  1.00 19.14        C
ATOM   11116  C    GLY D 154    14.676  79.269  71.674  1.00 21.63        C
ATOM   11117  O    GLY D 154    14.388  78.441  72.544  1.00 22.40        O
ATOM   11118  N    GLU D 155    13.955  80.361  71.423  1.00 21.24        N
ATOM   11119  CA   GLU D 155    12.741  80.706  72.150  1.00 23.41        C
ATOM   11120  C    GLU D 155    12.886  80.613  73.667  1.00 23.73        C
ATOM   11121  O    GLU D 155    13.808  81.193  74.241  1.00 23.87        O
ATOM   11122  CB   GLU D 155    11.576  79.837  71.658  1.00 24.12        C
ATOM   11123  CG   GLU D 155    11.218  80.127  70.201  1.00 26.56        C
ATOM   11124  CD   GLU D 155     9.921  79.498  69.763  1.00 28.10        C
ATOM   11125  OE1  GLU D 155     9.184  78.996  70.633  1.00 33.22        O
ATOM   11126  OE2  GLU D 155     9.628  79.519  68.549  1.00 28.36        O
ATOM   11127  N    ALA D 156    11.975  79.892  74.310  1.00 23.94        N
ATOM   11128  CA   ALA D 156    12.000  79.737  75.760  1.00 23.91        C
ATOM   11129  C    ALA D 156    12.556  78.381  76.195  1.00 24.14        C
ATOM   11130  O    ALA D 156    12.366  77.967  77.341  1.00 23.24        O
ATOM   11131  CB   ALA D 156    10.591  79.932  76.330  1.00 24.00        C
ATOM   11132  N    GLY D 157    13.233  77.689  75.282  1.00 22.83        N
ATOM   11133  CA   GLY D 157    13.816  76.402  75.620  1.00 22.23        C
ATOM   11134  C    GLY D 157    12.920  75.183  75.475  1.00 22.43        C
ATOM   11135  O    GLY D 157    13.418  74.057  75.460  1.00 23.31        O
ATOM   11136  N    PHE D 158    11.609  75.393  75.375  1.00 22.01        N
ATOM   11137  CA   PHE D 158    10.663  74.288  75.232  1.00 21.81        C
ATOM   11138  C    PHE D 158    10.669  73.414  76.483  1.00 22.31        C
ATOM   11139  O    PHE D 158    10.533  72.193  76.398  1.00 21.51        O
ATOM   11140  CB   PHE D 158    11.029  73.431  74.016  1.00 20.90        C
ATOM   11141  CG   PHE D 158    10.803  74.119  72.703  1.00 21.98        C
ATOM   11142  CD1  PHE D 158     9.536  74.134  72.119  1.00 18.71        C
ATOM   11143  CD2  PHE D 158    11.847  74.783  72.063  1.00 19.81        C
ATOM   11144  CE1  PHE D 158     9.310  74.799  70.920  1.00 18.78        C
ATOM   11145  CE2  PHE D 158    11.629  75.455  70.859  1.00 21.46        C
ATOM   11146  CZ   PHE D 158    10.353  75.461  70.288  1.00 20.14        C
ATOM   11147  N    GLY D 159    10.838  74.041  77.641  1.00 21.82        N
ATOM   11148  CA   GLY D 159    10.857  73.285  78.877  1.00 22.77        C
ATOM   11149  C    GLY D 159    11.865  73.794  79.883  1.00 22.24        C
ATOM   11150  O    GLY D 159    12.030  75.001  80.054  1.00 24.28        O
ATOM   11151  N    GLY D 160    12.538  72.868  80.555  1.00 22.73        N
ATOM   11152  CA   GLY D 160    13.527  73.244  81.550  1.00 21.90        C
ATOM   11153  C    GLY D 160    14.934  73.338  80.992  1.00 22.15        C
ATOM   11154  O    GLY D 160    15.139  73.293  79.776  1.00 22.53        O
ATOM   11155  N    ALA D 161    15.910  73.452  81.889  1.00 21.66        N
ATOM   11156  CA   ALA D 161    17.310  73.569  81.501  1.00 20.38        C
ATOM   11157  C    ALA D 161    17.781  72.448  80.579  1.00 19.96        C
ATOM   11158  O    ALA D 161    18.591  72.681  79.682  1.00 22.55        O
ATOM   11159  CB   ALA D 161    18.185  73.623  82.748  1.00 22.06        C
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| ATOM | 11160 | N | LEU D 162 | 17.282 | 71.236 | 80.798 | 1.00 | 19.05 | N |
| ATOM | 11161 | CA | LEU D 162 | 17.671 | 70.095 | 79.976 | 1.00 | 19.04 | C |
| ATOM | 11162 | C | LEU D 162 | 17.117 | 70.210 | 78.556 | 1.00 | 19.92 | C |
| ATOM | 11163 | O | LEU D 162 | 17.764 | 69.783 | 77.598 | 1.00 | 20.47 | O |
| ATOM | 11164 | CB | LEU D 162 | 17.207 | 68.787 | 80.626 | 1.00 | 16.39 | C |
| ATOM | 11165 | CG | LEU D 162 | 17.838 | 68.551 | 81.999 | 1.00 | 19.53 | C |
| ATOM | 11166 | CD1 | LEU D 162 | 17.278 | 67.281 | 82.631 | 1.00 | 16.95 | C |
| ATOM | 11167 | CD2 | LEU D 162 | 19.362 | 68.464 | 81.846 | 1.00 | 17.95 | C |
| ATOM | 11168 | N | ASN D 163 | 15.919 | 70.772 | 78.421 | 1.00 | 18.97 | N |
| ATOM | 11169 | CA | ASN D 163 | 15.324 | 70.964 | 77.099 | 1.00 | 19.13 | C |
| ATOM | 11170 | C | ASN D 163 | 16.163 | 72.029 | 76.388 | 1.00 | 17.73 | C |
| ATOM | 11171 | O | ASN D 163 | 16.416 | 71.951 | 75.188 | 1.00 | 15.34 | O |
| ATOM | 11172 | CB | ASN D 163 | 13.872 | 71.439 | 77.230 | 1.00 | 17.14 | C |
| ATOM | 11173 | CG | ASN D 163 | 12.952 | 70.370 | 77.820 | 1.00 | 19.55 | C |
| ATOM | 11174 | OD1 | ASN D 163 | 12.492 | 69.466 | 77.116 | 1.00 | 19.49 | O |
| ATOM | 11175 | ND2 | ASN D 163 | 12.689 | 70.467 | 79.117 | 1.00 | 14.60 | N |
| ATOM | 11176 | N | VAL D 164 | 16.597 | 73.027 | 77.152 | 1.00 | 17.22 | N |
| ATOM | 11177 | CA | VAL D 164 | 17.415 | 74.103 | 76.604 | 1.00 | 17.51 | C |
| ATOM | 11178 | C | VAL D 164 | 18.723 | 73.529 | 76.100 | 1.00 | 17.75 | C |
| ATOM | 11179 | O | VAL D 164 | 19.202 | 73.886 | 75.028 | 1.00 | 16.30 | O |
| ATOM | 11180 | CB | VAL D 164 | 17.745 | 75.159 | 77.675 | 1.00 | 18.33 | C |
| ATOM | 11181 | CG1 | VAL D 164 | 18.905 | 76.026 | 77.214 | 1.00 | 15.66 | C |
| ATOM | 11182 | CG2 | VAL D 164 | 16.517 | 76.009 | 77.958 | 1.00 | 17.32 | C |
| ATOM | 11183 | N | TYR D 165 | 19.290 | 72.630 | 76.898 | 1.00 | 18.45 | N |
| ATOM | 11184 | CA | TYR D 165 | 20.553 | 72.000 | 76.565 | 1.00 | 17.75 | C |
| ATOM | 11185 | C | TYR D 165 | 20.445 | 71.242 | 75.242 | 1.00 | 18.55 | C |
| ATOM | 11186 | O | TYR D 165 | 21.277 | 71.407 | 74.349 | 1.00 | 19.51 | O |
| ATOM | 11187 | CB | TYR D 165 | 20.981 | 71.059 | 77.705 | 1.00 | 16.58 | C |
| ATOM | 11188 | CG | TYR D 165 | 22.304 | 70.366 | 77.469 | 1.00 | 16.84 | C |
| ATOM | 11189 | CD1 | TYR D 165 | 22.390 | 69.257 | 76.637 | 1.00 | 16.65 | C |
| ATOM | 11190 | CD2 | TYR D 165 | 23.482 | 70.859 | 78.030 | 1.00 | 18.10 | C |
| ATOM | 11191 | CE1 | TYR D 165 | 23.609 | 68.656 | 76.360 | 1.00 | 17.32 | C |
| ATOM | 11192 | CE2 | TYR D 165 | 24.708 | 70.269 | 77.762 | 1.00 | 15.97 | C |
| ATOM | 11193 | CZ | TYR D 165 | 24.767 | 69.166 | 76.921 | 1.00 | 17.87 | C |
| ATOM | 11194 | OH | TYR D 165 | 25.981 | 68.582 | 76.622 | 1.00 | 14.62 | O |
| ATOM | 11195 | N | GLU D 166 | 19.408 | 70.426 | 75.108 | 1.00 | 17.99 | N |
| ATOM | 11196 | CA | GLU D 166 | 19.235 | 69.651 | 73.892 | 1.00 | 16.62 | C |
| ATOM | 11197 | C | GLU D 166 | 19.007 | 70.497 | 72.647 | 1.00 | 16.93 | C |
| ATOM | 11198 | O | GLU D 166 | 19.505 | 70.163 | 71.566 | 1.00 | 16.56 | O |
| ATOM | 11199 | CB | GLU D 166 | 18.102 | 68.645 | 74.077 | 1.00 | 17.56 | C |
| ATOM | 11200 | CG | GLU D 166 | 18.491 | 67.475 | 74.970 | 1.00 | 17.55 | C |
| ATOM | 11201 | CD | GLU D 166 | 19.733 | 66.752 | 74.458 | 1.00 | 19.56 | C |
| ATOM | 11202 | OE1 | GLU D 166 | 19.753 | 66.359 | 73.273 | 1.00 | 20.71 | O |
| ATOM | 11203 | OE2 | GLU D 166 | 20.690 | 66.575 | 75.237 | 1.00 | 18.49 | O |
| ATOM | 11204 | N | LEU D 167 | 18.268 | 71.595 | 72.791 | 1.00 | 15.34 | N |
| ATOM | 11205 | CA | LEU D 167 | 18.012 | 72.466 | 71.654 | 1.00 | 15.00 | C |
| ATOM | 11206 | C | LEU D 167 | 19.319 | 73.109 | 71.177 | 1.00 | 15.89 | C |
| ATOM | 11207 | O | LEU D 167 | 19.629 | 73.099 | 69.986 | 1.00 | 16.57 | O |
| ATOM | 11208 | CB | LEU D 167 | 16.989 | 73.544 | 72.024 | 1.00 | 13.96 | C |
| ATOM | 11209 | CG | LEU D 167 | 16.655 | 74.579 | 70.938 | 1.00 | 16.16 | C |
| ATOM | 11210 | CD1 | LEU D 167 | 16.276 | 73.880 | 69.634 | 1.00 | 13.61 | C |
| ATOM | 11211 | CD2 | LEU D 167 | 15.514 | 75.463 | 71.416 | 1.00 | 11.63 | C |
| ATOM | 11212 | N | GLN D 168 | 20.089 | 73.654 | 72.117 | 1.00 | 16.74 | N |
| ATOM | 11213 | CA | GLN D 168 | 21.360 | 74.290 | 71.798 | 1.00 | 15.43 | C |
| ATOM | 11214 | C | GLN D 168 | 22.274 | 73.293 | 71.092 | 1.00 | 16.53 | C |
| ATOM | 11215 | O | GLN D 168 | 22.880 | 73.608 | 70.063 | 1.00 | 17.28 | O |
| ATOM | 11216 | CB | GLN D 168 | 22.032 | 74.796 | 73.079 | 1.00 | 17.36 | C |
| ATOM | 11217 | CG | GLN D 168 | 23.416 | 75.377 | 72.861 | 1.00 | 15.22 | C |
| ATOM | 11218 | CD | GLN D 168 | 23.387 | 76.748 | 72.229 | 1.00 | 16.26 | C |
| ATOM | 11219 | OE1 | GLN D 168 | 22.658 | 76.988 | 71.268 | 1.00 | 14.51 | O |
| ATOM | 11220 | NE2 | GLN D 168 | 24.198 | 77.661 | 72.761 | 1.00 | 15.68 | N |
| ATOM | 11221 | N | LYS D 169 | 22.372 | 72.091 | 71.653 | 1.00 | 15.47 | N |
| ATOM | 11222 | CA | LYS D 169 | 23.198 | 71.039 | 71.067 | 1.00 | 14.66 | C |
| ATOM | 11223 | C | LYS D 169 | 22.749 | 70.741 | 69.628 | 1.00 | 15.11 | C |
| ATOM | 11224 | O | LYS D 169 | 23.573 | 70.664 | 68.714 | 1.00 | 14.19 | O |
| ATOM | 11225 | CB | LYS D 169 | 23.106 | 69.773 | 71.925 | 1.00 | 14.67 | C |
| ATOM | 11226 | CG | LYS D 169 | 23.818 | 68.563 | 71.348 | 1.00 | 15.66 | C |
| ATOM | 11227 | CD | LYS D 169 | 23.661 | 67.359 | 72.265 | 1.00 | 15.80 | C |
| ATOM | 11228 | CE | LYS D 169 | 24.309 | 66.117 | 71.672 | 1.00 | 19.09 | C |
| ATOM | 11229 | NZ | LYS D 169 | 24.287 | 64.982 | 72.631 | 1.00 | 22.09 | N |
| ATOM | 11230 | N | ALA D 170 | 21.439 | 70.591 | 69.430 | 1.00 | 15.23 | N |
| ATOM | 11231 | CA | ALA D 170 | 20.886 | 70.311 | 68.104 | 1.00 | 14.86 | C |
| ATOM | 11232 | C | ALA D 170 | 21.158 | 71.474 | 67.146 | 1.00 | 14.19 | C |
| ATOM | 11233 | O | ALA D 170 | 21.447 | 71.260 | 65.967 | 1.00 | 13.07 | O |
| ATOM | 11234 | CB | ALA D 170 | 19.371 | 70.038 | 68.204 | 1.00 | 11.96 | C |
| ATOM | 11235 | N | LEU D 171 | 21.056 | 72.704 | 67.649 | 1.00 | 14.46 | N |
| ATOM | 11236 | CA | LEU D 171 | 21.321 | 73.879 | 66.824 | 1.00 | 14.37 | C |
| ATOM | 11237 | C | LEU D 171 | 22.775 | 73.840 | 66.362 | 1.00 | 16.87 | C |
| ATOM | 11238 | O | LEU D 171 | 23.082 | 74.097 | 65.191 | 1.00 | 17.76 | O |
| ATOM | 11239 | CB | LEU D 171 | 21.076 | 75.167 | 67.618 | 1.00 | 13.33 | C |

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ATOM  11240  CG  LEU D 171      19.623  75.520  67.963  1.00 13.71           C
ATOM  11241  CD1 LEU D 171      19.592  76.739  68.868  1.00 13.02           C
ATOM  11242  CD2 LEU D 171      18.829  75.780  66.684  1.00 14.93           C
ATOM  11243  N   ILE D 172      23.663  73.508  67.298  1.00 16.38           N
ATOM  11244  CA  ILE D 172      25.088  73.428  67.031  1.00 15.11           C
ATOM  11245  C   ILE D 172      25.403  72.315  66.038  1.00 16.31           C
ATOM  11246  O   ILE D 172      26.265  72.476  65.172  1.00 16.23           O
ATOM  11247  CB  ILE D 172      25.881  73.203  68.354  1.00 16.01           C
ATOM  11248  CG1 ILE D 172      25.827  74.479  69.204  1.00 18.30           C
ATOM  11249  CG2 ILE D 172      27.309  72.820  68.053  1.00 14.23           C
ATOM  11250  CD1 ILE D 172      26.473  74.363  70.573  1.00 16.97           C
ATOM  11251  N   ALA D 173      24.707  71.187  66.163  1.00 15.79           N
ATOM  11252  CA  ALA D 173      24.923  70.063  65.259  1.00 16.48           C
ATOM  11253  C   ALA D 173      24.533  70.465  63.840  1.00 15.69           C
ATOM  11254  O   ALA D 173      25.152  70.042  62.866  1.00 16.70           O
ATOM  11255  CB  ALA D 173      24.094  68.852  65.715  1.00 16.96           C
ATOM  11256  N   ALA D 174      23.509  71.304  63.744  1.00 16.31           N
ATOM  11257  CA  ALA D 174      22.992  71.793  62.471  1.00 14.36           C
ATOM  11258  C   ALA D 174      23.907  72.853  61.849  1.00 16.39           C
ATOM  11259  O   ALA D 174      23.813  73.131  60.646  1.00 16.34           O
ATOM  11260  CB  ALA D 174      21.595  72.361  62.680  1.00 12.00           C
ATOM  11261  N   GLY D 175      24.767  73.454  62.672  1.00 15.42           N
ATOM  11262  CA  GLY D 175      25.704  74.460  62.187  1.00 15.86           C
ATOM  11263  C   GLY D 175      25.355  75.909  62.483  1.00 16.18           C
ATOM  11264  O   GLY D 175      25.683  76.802  61.706  1.00 16.63           O
ATOM  11265  N   VAL D 176      24.697  76.155  63.606  1.00 15.56           N
ATOM  11266  CA  VAL D 176      24.309  77.509  63.972  1.00 15.55           C
ATOM  11267  C   VAL D 176      25.527  78.286  64.481  1.00 18.26           C
ATOM  11268  O   VAL D 176      26.488  77.687  64.962  1.00 17.87           O
ATOM  11269  CB  VAL D 176      23.217  77.478  65.069  1.00 14.42           C
ATOM  11270  CG1 VAL D 176      23.846  77.218  66.435  1.00 14.71           C
ATOM  11271  CG2 VAL D 176      22.436  78.761  65.060  1.00 13.35           C
ATOM  11272  N   ALA D 177      25.488  79.614  64.371  1.00 18.98           N
ATOM  11273  CA  ALA D 177      26.597  80.450  64.834  1.00 19.77           C
ATOM  11274  C   ALA D 177      26.253  81.103  66.168  1.00 20.65           C
ATOM  11275  O   ALA D 177      27.126  81.314  67.010  1.00 21.83           O
ATOM  11276  CB  ALA D 177      26.928  81.525  63.793  1.00 19.63           C
ATOM  11277  N   GLY D 178      24.974  81.416  66.355  1.00 19.79           N
ATOM  11278  CA  GLY D 178      24.519  82.041  67.585  1.00 18.12           C
ATOM  11279  C   GLY D 178      23.066  81.693  67.851  1.00 18.29           C
ATOM  11280  O   GLY D 178      22.320  81.377  66.920  1.00 19.51           O
ATOM  11281  N   SER D 179      22.654  81.735  69.114  1.00 16.43           N
ATOM  11282  CA  SER D 179      21.277  81.409  69.462  1.00 16.97           C
ATOM  11283  C   SER D 179      20.773  82.314  70.586  1.00 16.88           C
ATOM  11284  O   SER D 179      21.544  82.682  71.468  1.00 17.20           O
ATOM  11285  CB  SER D 179      21.190  79.934  69.885  1.00 18.25           C
ATOM  11286  OG  SER D 179      22.022  79.657  71.002  1.00 19.85           O
ATOM  11287  N   HIS D 180      19.493  82.688  70.548  1.00 18.37           N
ATOM  11288  CA  HIS D 180      18.941  83.544  71.598  1.00 18.75           C
ATOM  11289  C   HIS D 180      17.901  82.848  72.465  1.00 19.61           C
ATOM  11290  O   HIS D 180      17.176  81.960  72.002  1.00 20.64           O
ATOM  11291  CB  HIS D 180      18.378  84.865  71.028  1.00 17.09           C
ATOM  11292  CG  HIS D 180      17.180  84.717  70.136  1.00 18.03           C
ATOM  11293  ND1 HIS D 180      17.254  84.841  68.763  1.00 17.86           N
ATOM  11294  CD2 HIS D 180      15.863  84.577  70.427  1.00 14.29           C
ATOM  11295  CE1 HIS D 180      16.037  84.792  68.250  1.00 15.25           C
ATOM  11296  NE2 HIS D 180      15.175  84.633  69.239  1.00 15.37           N
ATOM  11297  N   TRP D 181      17.851  83.254  73.734  1.00 19.34           N
ATOM  11298  CA  TRP D 181      16.943  82.670  74.713  1.00 19.00           C
ATOM  11299  C   TRP D 181      16.238  83.736  75.529  1.00 20.81           C
ATOM  11300  O   TRP D 181      16.877  84.648  76.060  1.00 21.44           O
ATOM  11301  CB  TRP D 181      17.726  81.737  75.628  1.00 17.86           C
ATOM  11302  CG  TRP D 181      18.652  80.876  74.855  1.00 18.35           C
ATOM  11303  CD1 TRP D 181      19.863  81.237  74.329  1.00 17.31           C
ATOM  11304  CD2 TRP D 181      18.410  79.534  74.423  1.00 17.37           C
ATOM  11305  NE1 TRP D 181      20.385  80.203  73.591  1.00 17.85           N
ATOM  11306  CE2 TRP D 181      19.515  79.144  73.632  1.00 16.65           C
ATOM  11307  CE3 TRP D 181      17.365  78.621  74.625  1.00 17.34           C
ATOM  11308  CZ2 TRP D 181      19.607  77.877  73.041  1.00 14.32           C
ATOM  11309  CZ3 TRP D 181      17.456  77.352  74.035  1.00 15.47           C
ATOM  11310  CH2 TRP D 181      18.571  76.999  73.254  1.00 15.18           C
ATOM  11311  N   GLU D 182      14.917  83.595  75.635  1.00 20.24           N
ATOM  11312  CA  GLU D 182      14.063  84.544  76.338  1.00 19.47           C
ATOM  11313  C   GLU D 182      13.587  84.086  77.712  1.00 21.30           C
ATOM  11314  O   GLU D 182      13.457  82.887  77.978  1.00 22.59           O
ATOM  11315  CB  GLU D 182      12.859  84.860  75.453  1.00 20.03           C
ATOM  11316  CG  GLU D 182      12.108  83.618  75.020  1.00 22.44           C
ATOM  11317  CD  GLU D 182      11.303  83.823  73.756  1.00 22.81           C
ATOM  11318  OE1 GLU D 182      11.873  84.323  72.761  1.00 21.81           O
ATOM  11319  OE2 GLU D 182      10.106  83.473  73.754  1.00 21.85           O
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| ATOM | 11320 | N | ASP | D | 183 | 13.305 | 85.059 | 78.576 | 1.00 | 20.72 | N |
| ATOM | 11321 | CA | ASP | D | 183 | 12.868 | 84.781 | 79.933 | 1.00 | 21.11 | C |
| ATOM | 11322 | C | ASP | D | 183 | 11.355 | 84.675 | 80.099 | 1.00 | 22.04 | C |
| ATOM | 11323 | O | ASP | D | 183 | 10.774 | 85.292 | 80.995 | 1.00 | 23.69 | O |
| ATOM | 11324 | CB | ASP | D | 183 | 13.437 | 85.831 | 80.909 | 1.00 | 20.48 | C |
| ATOM | 11325 | CG | ASP | D | 183 | 13.146 | 87.267 | 80.485 | 1.00 | 22.95 | C |
| ATOM | 11326 | OD1 | ASP | D | 183 | 12.316 | 87.490 | 79.568 | 1.00 | 24.66 | O |
| ATOM | 11327 | OD2 | ASP | D | 183 | 13.748 | 88.183 | 81.083 | 1.00 | 21.44 | O |
| ATOM | 11328 | N | GLN | D | 184 | 10.727 | 83.884 | 79.233 | 1.00 | 23.72 | N |
| ATOM | 11329 | CA | GLN | D | 184 | 9.286 | 83.655 | 79.281 | 1.00 | 25.27 | C |
| ATOM | 11330 | C | GLN | D | 184 | 9.024 | 82.215 | 79.677 | 1.00 | 26.82 | C |
| ATOM | 11331 | O | GLN | D | 184 | 9.861 | 81.344 | 79.447 | 1.00 | 28.15 | O |
| ATOM | 11332 | CB | GLN | D | 184 | 8.639 | 83.847 | 77.915 | 1.00 | 25.83 | C |
| ATOM | 11333 | CG | GLN | D | 184 | 8.515 | 85.252 | 77.398 | 1.00 | 24.77 | C |
| ATOM | 11334 | CD | GLN | D | 184 | 7.638 | 85.281 | 76.166 | 1.00 | 23.71 | C |
| ATOM | 11335 | OE1 | GLN | D | 184 | 6.498 | 84.820 | 76.201 | 1.00 | 23.42 | O |
| ATOM | 11336 | NE2 | GLN | D | 184 | 8.162 | 85.812 | 75.070 | 1.00 | 22.55 | N |
| ATOM | 11337 | N | LEU | D | 185 | 7.853 | 81.963 | 80.254 | 1.00 | 29.16 | N |
| ATOM | 11338 | CA | LEU | D | 185 | 7.471 | 80.607 | 80.634 | 1.00 | 29.33 | C |
| ATOM | 11339 | C | LEU | D | 185 | 7.250 | 79.884 | 79.306 | 1.00 | 30.64 | C |
| ATOM | 11340 | O | LEU | D | 185 | 6.434 | 80.318 | 78.493 | 1.00 | 30.30 | O |
| ATOM | 11341 | CB | LEU | D | 185 | 6.174 | 80.625 | 81.451 | 1.00 | 27.26 | C |
| ATOM | 11342 | CG | LEU | D | 185 | 5.543 | 79.271 | 81.807 | 1.00 | 26.56 | C |
| ATOM | 11343 | CD1 | LEU | D | 185 | 6.464 | 78.481 | 82.717 | 1.00 | 23.11 | C |
| ATOM | 11344 | CD2 | LEU | D | 185 | 4.205 | 79.503 | 82.483 | 1.00 | 24.56 | C |
| ATOM | 11345 | N | ALA | D | 186 | 7.988 | 78.799 | 79.079 | 1.00 | 31.28 | N |
| ATOM | 11346 | CA | ALA | D | 186 | 7.876 | 78.052 | 77.827 | 1.00 | 31.02 | C |
| ATOM | 11347 | C | ALA | D | 186 | 6.455 | 77.589 | 77.507 | 1.00 | 31.52 | C |
| ATOM | 11348 | O | ALA | D | 186 | 5.999 | 77.726 | 76.372 | 1.00 | 32.08 | O |
| ATOM | 11349 | CB | ALA | D | 186 | 8.824 | 76.851 | 77.846 | 1.00 | 29.64 | C |
| ATOM | 11350 | N | SER | D | 187 | 5.756 | 77.049 | 78.503 | 1.00 | 30.94 | N |
| ATOM | 11351 | CA | SER | D | 187 | 4.396 | 76.554 | 78.301 | 1.00 | 31.72 | C |
| ATOM | 11352 | C | SER | D | 187 | 3.368 | 77.641 | 77.970 | 1.00 | 32.16 | C |
| ATOM | 11353 | O | SER | D | 187 | 2.231 | 77.338 | 77.612 | 1.00 | 32.79 | O |
| ATOM | 11354 | CB | SER | D | 187 | 3.937 | 75.766 | 79.532 | 1.00 | 31.23 | C |
| ATOM | 11355 | OG | SER | D | 187 | 3.954 | 76.576 | 80.690 | 1.00 | 32.65 | O |
| ATOM | 11356 | N | GLU | D | 188 | 3.763 | 78.902 | 78.088 | 1.00 | 32.75 | N |
| ATOM | 11357 | CA | GLU | D | 188 | 2.861 | 80.008 | 77.782 | 1.00 | 33.35 | C |
| ATOM | 11358 | C | GLU | D | 188 | 3.570 | 81.005 | 76.875 | 1.00 | 32.42 | C |
| ATOM | 11359 | O | GLU | D | 188 | 3.101 | 82.128 | 76.693 | 1.00 | 34.01 | O |
| ATOM | 11360 | CB | GLU | D | 188 | 2.423 | 80.730 | 79.061 | 1.00 | 33.79 | C |
| ATOM | 11361 | CG | GLU | D | 188 | 1.661 | 79.883 | 80.066 | 1.00 | 36.40 | C |
| ATOM | 11362 | CD | GLU | D | 188 | 0.341 | 79.360 | 79.531 | 1.00 | 38.56 | C |
| ATOM | 11363 | OE1 | GLU | D | 188 | -0.319 | 80.082 | 78.751 | 1.00 | 40.72 | O |
| ATOM | 11364 | OE2 | GLU | D | 188 | -0.043 | 78.232 | 79.908 | 1.00 | 38.86 | O |
| ATOM | 11365 | N | LYS | D | 189 | 4.704 | 80.589 | 76.317 | 1.00 | 32.42 | N |
| ATOM | 11366 | CA | LYS | D | 189 | 5.492 | 81.448 | 75.437 | 1.00 | 31.55 | C |
| ATOM | 11367 | C | LYS | D | 189 | 4.604 | 82.194 | 74.448 | 1.00 | 32.65 | C |
| ATOM | 11368 | O | LYS | D | 189 | 3.698 | 81.616 | 73.841 | 1.00 | 32.68 | O |
| ATOM | 11369 | CB | LYS | D | 189 | 6.544 | 80.616 | 74.687 | 1.00 | 29.27 | C |
| ATOM | 11370 | CG | LYS | D | 189 | 7.459 | 81.400 | 73.730 | 1.00 | 27.99 | C |
| ATOM | 11371 | CD | LYS | D | 189 | 6.781 | 81.672 | 72.385 | 1.00 | 28.51 | C |
| ATOM | 11372 | CE | LYS | D | 189 | 7.766 | 82.181 | 71.329 | 1.00 | 28.71 | C |
| ATOM | 11373 | NZ | LYS | D | 189 | 8.335 | 83.525 | 71.647 | 1.00 | 27.28 | N |
| ATOM | 11374 | N | LYS | D | 190 | 4.867 | 83.490 | 74.307 | 1.00 | 33.13 | N |
| ATOM | 11375 | CA | LYS | D | 190 | 4.118 | 84.344 | 73.397 | 1.00 | 33.86 | C |
| ATOM | 11376 | C | LYS | D | 190 | 5.103 | 85.094 | 72.526 | 1.00 | 34.63 | C |
| ATOM | 11377 | O | LYS | D | 190 | 6.261 | 85.283 | 72.902 | 1.00 | 33.80 | O |
| ATOM | 11378 | CB | LYS | D | 190 | 3.290 | 85.370 | 74.172 | 1.00 | 33.67 | C |
| ATOM | 11379 | CG | LYS | D | 190 | 2.195 | 84.792 | 75.035 | 1.00 | 34.40 | C |
| ATOM | 11380 | CD | LYS | D | 190 | 1.077 | 84.219 | 74.196 | 1.00 | 35.80 | C |
| ATOM | 11381 | CE | LYS | D | 190 | -0.104 | 83.868 | 75.077 | 1.00 | 35.89 | C |
| ATOM | 11382 | NZ | LYS | D | 190 | 0.308 | 82.990 | 76.216 | 1.00 | 37.40 | N |
| ATOM | 11383 | N | SER | D | 191 | 4.642 | 85.516 | 71.356 | 1.00 | 35.91 | N |
| ATOM | 11384 | CA | SER | D | 191 | 5.487 | 86.286 | 70.461 | 1.00 | 35.49 | C |
| ATOM | 11385 | C | SER | D | 191 | 5.834 | 87.548 | 71.249 | 1.00 | 34.82 | C |
| ATOM | 11386 | O | SER | D | 191 | 5.041 | 88.001 | 72.074 | 1.00 | 34.32 | O |
| ATOM | 11387 | CB | SER | D | 191 | 4.713 | 86.647 | 69.196 | 1.00 | 36.44 | C |
| ATOM | 11388 | OG | SER | D | 191 | 5.539 | 87.322 | 68.270 | 1.00 | 38.73 | O |
| ATOM | 11389 | N | GLY | D | 192 | 7.016 | 88.102 | 71.010 | 1.00 | 34.42 | N |
| ATOM | 11390 | CA | GLY | D | 192 | 7.428 | 89.298 | 71.725 | 1.00 | 34.73 | C |
| ATOM | 11391 | C | GLY | D | 192 | 6.424 | 90.436 | 71.678 | 1.00 | 34.36 | C |
| ATOM | 11392 | O | GLY | D | 192 | 6.340 | 91.234 | 72.614 | 1.00 | 34.90 | O |
| ATOM | 11393 | N | HIS | D | 193 | 5.647 | 90.504 | 70.601 | 1.00 | 33.88 | N |
| ATOM | 11394 | CA | HIS | D | 193 | 4.669 | 91.570 | 70.453 | 1.00 | 33.93 | C |
| ATOM | 11395 | C | HIS | D | 193 | 3.210 | 91.143 | 70.594 | 1.00 | 34.44 | C |
| ATOM | 11396 | O | HIS | D | 193 | 2.307 | 91.807 | 70.091 | 1.00 | 34.39 | O |
| ATOM | 11397 | CB | HIS | D | 193 | 4.904 | 92.293 | 69.126 | 1.00 | 32.80 | C |
| ATOM | 11398 | CG | HIS | D | 193 | 6.297 | 92.822 | 68.984 | 1.00 | 34.34 | C |
| ATOM | 11399 | ND1 | HIS | D | 193 | 7.314 | 92.097 | 68.401 | 1.00 | 35.53 | N |

| ATOM | 11400 | CD2 | HIS | D | 193 | 6.861 | 93.975 | 69.420 | 1.00 | 34.31 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 11401 | CE1 | HIS | D | 193 | 8.444 | 92.778 | 68.484 | 1.00 | 35.02 | C |
| ATOM | 11402 | NE2 | HIS | D | 193 | 8.196 | 93.921 | 69.099 | 1.00 | 33.19 | N |
| ATOM | 11403 | N | LEU | D | 194 | 2.992 | 90.029 | 71.286 | 1.00 | 35.06 | N |
| ATOM | 11404 | CA | LEU | D | 194 | 1.646 | 89.525 | 71.552 | 1.00 | 34.91 | C |
| ATOM | 11405 | C | LEU | D | 194 | 1.435 | 89.678 | 73.058 | 1.00 | 34.85 | C |
| ATOM | 11406 | O | LEU | D | 194 | 2.401 | 89.701 | 73.821 | 1.00 | 35.07 | O |
| ATOM | 11407 | CB | LEU | D | 194 | 1.516 | 88.044 | 71.170 | 1.00 | 33.64 | C |
| ATOM | 11408 | CG | LEU | D | 194 | 1.426 | 87.640 | 69.693 | 1.00 | 35.19 | C |
| ATOM | 11409 | CD1 | LEU | D | 194 | 1.366 | 86.118 | 69.608 | 1.00 | 35.81 | C |
| ATOM | 11410 | CD2 | LEU | D | 194 | 0.187 | 88.248 | 69.036 | 1.00 | 32.52 | C |
| ATOM | 11411 | N | GLY | D | 195 | 0.182 | 89.783 | 73.483 | 1.00 | 34.95 | N |
| ATOM | 11412 | CA | GLY | D | 195 | -0.095 | 89.930 | 74.899 | 1.00 | 34.38 | C |
| ATOM | 11413 | C | GLY | D | 195 | -0.117 | 88.598 | 75.624 | 1.00 | 35.01 | C |
| ATOM | 11414 | O | GLY | D | 195 | 0.143 | 87.550 | 75.024 | 1.00 | 35.11 | O |
| ATOM | 11415 | N | GLY | D | 196 | -0.423 | 88.646 | 76.918 | 1.00 | 34.58 | N |
| ATOM | 11416 | CA | GLY | D | 196 | -0.486 | 87.442 | 77.723 | 1.00 | 33.92 | C |
| ATOM | 11417 | C | GLY | D | 196 | 0.859 | 86.785 | 77.967 | 1.00 | 34.82 | C |
| ATOM | 11418 | O | GLY | D | 196 | 0.948 | 85.556 | 78.015 | 1.00 | 35.68 | O |
| ATOM | 11419 | N | LYS | D | 197 | 1.909 | 87.591 | 78.119 | 1.00 | 33.04 | N |
| ATOM | 11420 | CA | LYS | D | 197 | 3.241 | 87.045 | 78.362 | 1.00 | 30.69 | C |
| ATOM | 11421 | C | LYS | D | 197 | 3.524 | 86.856 | 79.851 | 1.00 | 29.95 | C |
| ATOM | 11422 | O | LYS | D | 197 | 3.181 | 87.707 | 80.679 | 1.00 | 30.60 | O |
| ATOM | 11423 | CB | LYS | D | 197 | 4.321 | 87.945 | 77.749 | 1.00 | 27.66 | C |
| ATOM | 11424 | CG | LYS | D | 197 | 4.206 | 88.099 | 76.244 | 1.00 | 28.77 | C |
| ATOM | 11425 | CD | LYS | D | 197 | 5.505 | 88.597 | 75.623 | 1.00 | 26.83 | C |
| ATOM | 11426 | CE | LYS | D | 197 | 5.912 | 89.961 | 76.141 | 1.00 | 22.23 | C |
| ATOM | 11427 | NZ | LYS | D | 197 | 7.165 | 90.385 | 75.464 | 1.00 | 25.13 | N |
| ATOM | 11428 | N | VAL | D | 198 | 4.145 | 85.726 | 80.178 | 1.00 | 28.02 | N |
| ATOM | 11429 | CA | VAL | D | 198 | 4.499 | 85.398 | 81.551 | 1.00 | 24.92 | C |
| ATOM | 11430 | C | VAL | D | 198 | 6.009 | 85.223 | 81.650 | 1.00 | 24.25 | C |
| ATOM | 11431 | O | VAL | D | 198 | 6.595 | 84.407 | 80.938 | 1.00 | 24.30 | O |
| ATOM | 11432 | CB | VAL | D | 198 | 3.835 | 84.089 | 82.016 | 1.00 | 23.93 | C |
| ATOM | 11433 | CG1 | VAL | D | 198 | 4.092 | 83.891 | 83.499 | 1.00 | 22.31 | C |
| ATOM | 11434 | CG2 | VAL | D | 198 | 2.341 | 84.122 | 81.734 | 1.00 | 21.57 | C |
| ATOM | 11435 | N | LEU | D | 199 | 6.638 | 85.995 | 82.526 | 1.00 | 23.00 | N |
| ATOM | 11436 | CA | LEU | D | 199 | 8.081 | 85.900 | 82.709 | 1.00 | 25.00 | C |
| ATOM | 11437 | C | LEU | D | 199 | 8.399 | 84.811 | 83.728 | 1.00 | 24.78 | C |
| ATOM | 11438 | O | LEU | D | 199 | 7.537 | 84.388 | 84.498 | 1.00 | 25.31 | O |
| ATOM | 11439 | CB | LEU | D | 199 | 8.654 | 87.231 | 83.211 | 1.00 | 22.35 | C |
| ATOM | 11440 | CG | LEU | D | 199 | 8.459 | 88.492 | 82.359 | 1.00 | 24.08 | C |
| ATOM | 11441 | CD1 | LEU | D | 199 | 8.959 | 89.711 | 83.135 | 1.00 | 21.94 | C |
| ATOM | 11442 | CD2 | LEU | D | 199 | 9.203 | 88.361 | 81.039 | 1.00 | 21.81 | C |
| ATOM | 11443 | N | ILE | D | 200 | 9.638 | 84.343 | 83.707 | 1.00 | 25.73 | N |
| ATOM | 11444 | CA | ILE | D | 200 | 10.086 | 83.348 | 84.667 | 1.00 | 24.34 | C |
| ATOM | 11445 | C | ILE | D | 200 | 11.071 | 84.097 | 85.563 | 1.00 | 23.25 | C |
| ATOM | 11446 | O | ILE | D | 200 | 11.526 | 85.185 | 85.214 | 1.00 | 22.86 | O |
| ATOM | 11447 | CB | ILE | D | 200 | 10.760 | 82.129 | 83.968 | 1.00 | 26.27 | C |
| ATOM | 11448 | CG1 | ILE | D | 200 | 11.655 | 82.580 | 82.808 | 1.00 | 26.69 | C |
| ATOM | 11449 | CG2 | ILE | D | 200 | 9.693 | 81.173 | 83.468 | 1.00 | 23.57 | C |
| ATOM | 11450 | CD1 | ILE | D | 200 | 12.917 | 83.274 | 83.229 | 1.00 | 25.83 | C |
| ATOM | 11451 | N | PRO | D | 201 | 11.394 | 83.546 | 86.734 | 1.00 | 21.75 | N |
| ATOM | 11452 | CA | PRO | D | 201 | 12.334 | 84.264 | 87.603 | 1.00 | 22.07 | C |
| ATOM | 11453 | C | PRO | D | 201 | 13.675 | 84.579 | 86.940 | 1.00 | 22.93 | C |
| ATOM | 11454 | O | PRO | D | 201 | 14.131 | 83.849 | 86.052 | 1.00 | 23.67 | O |
| ATOM | 11455 | CB | PRO | D | 201 | 12.478 | 83.328 | 88.804 | 1.00 | 20.50 | C |
| ATOM | 11456 | CG | PRO | D | 201 | 11.131 | 82.666 | 88.867 | 1.00 | 21.53 | C |
| ATOM | 11457 | CD | PRO | D | 201 | 10.846 | 82.357 | 87.410 | 1.00 | 20.05 | C |
| ATOM | 11458 | N | THR | D | 202 | 14.298 | 85.673 | 87.374 | 1.00 | 21.66 | N |
| ATOM | 11459 | CA | THR | D | 202 | 15.590 | 86.087 | 86.837 | 1.00 | 21.71 | C |
| ATOM | 11460 | C | THR | D | 202 | 16.600 | 84.942 | 86.884 | 1.00 | 21.05 | C |
| ATOM | 11461 | O | THR | D | 202 | 17.261 | 84.644 | 85.894 | 1.00 | 19.69 | O |
| ATOM | 11462 | CB | THR | D | 202 | 16.171 | 87.294 | 87.633 | 1.00 | 21.26 | C |
| ATOM | 11463 | OG1 | THR | D | 202 | 15.353 | 88.450 | 87.418 | 1.00 | 22.41 | O |
| ATOM | 11464 | CG2 | THR | D | 202 | 17.589 | 87.612 | 87.187 | 1.00 | 17.98 | C |
| ATOM | 11465 | N | GLN | D | 203 | 16.709 | 84.298 | 88.041 | 1.00 | 22.75 | N |
| ATOM | 11466 | CA | GLN | D | 203 | 17.661 | 83.204 | 88.219 | 1.00 | 23.66 | C |
| ATOM | 11467 | C | GLN | D | 203 | 17.380 | 82.034 | 87.294 | 1.00 | 24.14 | C |
| ATOM | 11468 | O | GLN | D | 203 | 18.303 | 81.348 | 86.859 | 1.00 | 26.94 | O |
| ATOM | 11469 | CB | GLN | D | 203 | 17.650 | 82.714 | 89.671 | 1.00 | 23.84 | C |
| ATOM | 11470 | CG | GLN | D | 203 | 18.792 | 81.758 | 90.032 | 1.00 | 25.81 | C |
| ATOM | 11471 | CD | GLN | D | 203 | 20.145 | 82.289 | 89.597 | 1.00 | 26.99 | C |
| ATOM | 11472 | OE1 | GLN | D | 203 | 20.409 | 83.487 | 89.687 | 1.00 | 28.72 | O |
| ATOM | 11473 | NE2 | GLN | D | 203 | 21.010 | 81.401 | 89.120 | 1.00 | 27.42 | N |
| ATOM | 11474 | N | GLN | D | 204 | 16.106 | 81.808 | 86.993 | 1.00 | 23.87 | N |
| ATOM | 11475 | CA | GLN | D | 204 | 15.739 | 80.704 | 86.122 | 1.00 | 23.06 | C |
| ATOM | 11476 | C | GLN | D | 204 | 16.308 | 80.946 | 84.731 | 1.00 | 23.13 | C |
| ATOM | 11477 | O | GLN | D | 204 | 16.886 | 80.039 | 84.123 | 1.00 | 22.80 | O |
| ATOM | 11478 | CB | GLN | D | 204 | 14.216 | 80.544 | 86.051 | 1.00 | 24.21 | C |
| ATOM | 11479 | CG | GLN | D | 204 | 13.770 | 79.209 | 85.451 | 1.00 | 23.87 | C |

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ATOM   11480  CD   GLN D 204      12.257  79.031  85.455  1.00 23.98           C
ATOM   11481  OE1  GLN D 204      11.591  79.315  86.450  1.00 23.00           O
ATOM   11482  NE2  GLN D 204      11.713  78.542  84.343  1.00 23.42           N
ATOM   11483  N    HIS D 205      16.165  82.164  84.220  1.00 21.25           N
ATOM   11484  CA   HIS D 205      16.708  82.419  82.905  1.00 20.71           C
ATOM   11485  C    HIS D 205      18.225  82.332  82.950  1.00 19.30           C
ATOM   11486  O    HIS D 205      18.848  81.993  81.952  1.00 18.95           O
ATOM   11487  CB   HIS D 205      16.297  83.781  82.353  1.00 21.16           C
ATOM   11488  CG   HIS D 205      16.484  83.887  80.871  1.00 22.83           C
ATOM   11489  ND1  HIS D 205      17.121  84.951  80.269  1.00 24.50           N
ATOM   11490  CD2  HIS D 205      16.155  83.032  79.874  1.00 21.58           C
ATOM   11491  CE1  HIS D 205      17.180  84.745  78.965  1.00 24.30           C
ATOM   11492  NE2  HIS D 205      16.602  83.587  78.699  1.00 23.99           N
ATOM   11493  N    ILE D 206      18.826  82.635  84.098  1.00 19.54           N
ATOM   11494  CA   ILE D 206      20.283  82.537  84.193  1.00 19.28           C
ATOM   11495  C    ILE D 206      20.667  81.069  84.059  1.00 18.52           C
ATOM   11496  O    ILE D 206      21.699  80.748  83.480  1.00 20.00           O
ATOM   11497  CB   ILE D 206      20.830  83.124  85.523  1.00 19.18           C
ATOM   11498  CG1  ILE D 206      20.743  84.652  85.476  1.00 20.85           C
ATOM   11499  CG2  ILE D 206      22.286  82.699  85.737  1.00 16.38           C
ATOM   11500  CD1  ILE D 206      21.285  85.354  86.708  1.00 21.62           C
ATOM   11501  N    ARG D 207      19.829  80.176  84.580  1.00 20.06           N
ATOM   11502  CA   ARG D 207      20.088  78.743  84.452  1.00 21.12           C
ATOM   11503  C    ARG D 207      19.990  78.387  82.970  1.00 19.31           C
ATOM   11504  O    ARG D 207      20.764  77.576  82.463  1.00 21.04           O
ATOM   11505  CB   ARG D 207      19.066  77.909  85.243  1.00 23.52           C
ATOM   11506  CG   ARG D 207      19.307  77.858  86.750  1.00 29.41           C
ATOM   11507  CD   ARG D 207      18.563  76.690  87.412  1.00 31.12           C
ATOM   11508  NE   ARG D 207      17.116  76.886  87.477  1.00 32.23           N
ATOM   11509  CZ   ARG D 207      16.516  77.789  88.249  1.00 34.10           C
ATOM   11510  NH1  ARG D 207      17.237  78.585  89.030  1.00 34.65           N
ATOM   11511  NH2  ARG D 207      15.195  77.904  88.236  1.00 33.81           N
ATOM   11512  N    THR D 208      19.036  79.001  82.277  1.00 18.68           N
ATOM   11513  CA   THR D 208      18.858  78.752  80.849  1.00 19.10           C
ATOM   11514  C    THR D 208      20.108  79.181  80.082  1.00 19.28           C
ATOM   11515  O    THR D 208      20.655  78.415  79.286  1.00 18.92           O
ATOM   11516  CB   THR D 208      17.644  79.526  80.285  1.00 19.60           C
ATOM   11517  OG1  THR D 208      16.428  78.932  80.759  1.00 19.01           O
ATOM   11518  CG2  THR D 208      17.662  79.503  78.758  1.00 17.21           C
ATOM   11519  N    LEU D 209      20.556  80.410  80.324  1.00 19.31           N
ATOM   11520  CA   LEU D 209      21.742  80.923  79.653  1.00 19.16           C
ATOM   11521  C    LEU D 209      22.943  80.049  79.993  1.00 19.09           C
ATOM   11522  O    LEU D 209      23.780  79.769  79.139  1.00 21.41           O
ATOM   11523  CB   LEU D 209      21.994  82.374  80.065  1.00 16.70           C
ATOM   11524  CG   LEU D 209      20.879  83.350  79.664  1.00 18.10           C
ATOM   11525  CD1  LEU D 209      21.130  84.721  80.283  1.00 17.76           C
ATOM   11526  CD2  LEU D 209      20.810  83.456  78.148  1.00 15.08           C
ATOM   11527  N    THR D 210      23.010  79.596  81.238  1.00 20.77           N
ATOM   11528  CA   THR D 210      24.110  78.743  81.676  1.00 21.06           C
ATOM   11529  C    THR D 210      24.066  77.400  80.952  1.00 20.08           C
ATOM   11530  O    THR D 210      25.097  76.874  80.533  1.00 22.04           O
ATOM   11531  CB   THR D 210      24.044  78.505  83.187  1.00 21.19           C
ATOM   11532  OG1  THR D 210      24.173  79.760  83.865  1.00 21.06           O
ATOM   11533  CG2  THR D 210      25.161  77.568  83.631  1.00 22.15           C
ATOM   11534  N    SER D 211      22.871  76.849  80.793  1.00 18.87           N
ATOM   11535  CA   SER D 211      22.732  75.573  80.099  1.00 18.97           C
ATOM   11536  C    SER D 211      23.124  75.707  78.626  1.00 19.43           C
ATOM   11537  O    SER D 211      23.743  74.810  78.054  1.00 18.93           O
ATOM   11538  CB   SER D 211      21.298  75.061  80.198  1.00 17.34           C
ATOM   11539  OG   SER D 211      21.192  73.787  79.588  1.00 22.14           O
ATOM   11540  N    ALA D 212      22.759  76.833  78.021  1.00 19.14           N
ATOM   11541  CA   ALA D 212      23.074  77.084  76.622  1.00 19.02           C
ATOM   11542  C    ALA D 212      24.589  77.142  76.432  1.00 19.52           C
ATOM   11543  O    ALA D 212      25.117  76.649  75.441  1.00 18.71           O
ATOM   11544  CB   ALA D 212      22.439  78.391  76.173  1.00 19.16           C
ATOM   11545  N    ARG D 213      25.282  77.754  77.387  1.00 20.13           N
ATOM   11546  CA   ARG D 213      26.735  77.862  77.321  1.00 20.16           C
ATOM   11547  C    ARG D 213      27.356  76.488  77.531  1.00 19.69           C
ATOM   11548  O    ARG D 213      28.268  76.092  76.808  1.00 21.26           O
ATOM   11549  CB   ARG D 213      27.256  78.821  78.395  1.00 19.83           C
ATOM   11550  CG   ARG D 213      28.759  79.033  78.321  1.00 22.31           C
ATOM   11551  CD   ARG D 213      29.138  79.870  77.107  1.00 22.17           C
ATOM   11552  NE   ARG D 213      28.802  81.274  77.326  1.00 26.65           N
ATOM   11553  CZ   ARG D 213      28.864  82.222  76.395  1.00 27.83           C
ATOM   11554  NH1  ARG D 213      29.248  81.928  75.155  1.00 26.42           N
ATOM   11555  NH2  ARG D 213      28.544  83.471  76.712  1.00 27.79           N
ATOM   11556  N    LEU D 214      26.860  75.766  78.533  1.00 19.55           N
ATOM   11557  CA   LEU D 214      27.361  74.431  78.832  1.00 18.39           C
ATOM   11558  C    LEU D 214      27.266  73.526  77.604  1.00 18.91           C
ATOM   11559  O    LEU D 214      28.201  72.795  77.290  1.00 20.86           O
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| ATOM | 11560 | CB | LEU D 214 | 26.568 | 73.807 | 79.984 | 1.00 | 15.87 | C |
|------|-------|-----|-----------|--------|--------|--------|------|-------|---|
| ATOM | 11561 | CG | LEU D 214 | 27.003 | 72.379 | 80.343 | 1.00 | 17.39 | C |
| ATOM | 11562 | CD1 | LEU D 214 | 28.457 | 72.406 | 80.830 | 1.00 | 12.84 | C |
| ATOM | 11563 | CD2 | LEU D 214 | 26.070 | 71.789 | 81.410 | 1.00 | 10.80 | C |
| ATOM | 11564 | N | ALA D 215 | 26.135 | 73.572 | 76.910 | 1.00 | 19.53 | N |
| ATOM | 11565 | CA | ALA D 215 | 25.958 | 72.740 | 75.722 | 1.00 | 19.53 | C |
| ATOM | 11566 | C | ALA D 215 | 27.015 | 73.080 | 74.669 | 1.00 | 18.45 | C |
| ATOM | 11567 | O | ALA D 215 | 27.563 | 72.187 | 74.034 | 1.00 | 17.61 | O |
| ATOM | 11568 | CB | ALA D 215 | 24.548 | 72.928 | 75.140 | 1.00 | 19.23 | C |
| ATOM | 11569 | N | ALA D 216 | 27.291 | 74.368 | 74.483 | 1.00 | 17.54 | N |
| ATOM | 11570 | CA | ALA D 216 | 28.293 | 74.791 | 73.505 | 1.00 | 17.96 | C |
| ATOM | 11571 | C | ALA D 216 | 29.681 | 74.313 | 73.930 | 1.00 | 20.16 | C |
| ATOM | 11572 | O | ALA D 216 | 30.455 | 73.810 | 73.107 | 1.00 | 20.26 | O |
| ATOM | 11573 | CB | ALA D 216 | 28.280 | 76.309 | 73.354 | 1.00 | 18.10 | C |
| ATOM | 11574 | N | ASP D 217 | 29.992 | 74.459 | 75.218 | 1.00 | 19.78 | N |
| ATOM | 11575 | CA | ASP D 217 | 31.285 | 74.023 | 75.737 | 1.00 | 19.38 | C |
| ATOM | 11576 | C | ASP D 217 | 31.490 | 72.523 | 75.551 | 1.00 | 20.48 | C |
| ATOM | 11577 | O | ASP D 217 | 32.583 | 72.080 | 75.188 | 1.00 | 22.08 | O |
| ATOM | 11578 | CB | ASP D 217 | 31.424 | 74.365 | 77.224 | 1.00 | 18.63 | C |
| ATOM | 11579 | CG | ASP D 217 | 31.617 | 75.849 | 77.468 | 1.00 | 21.86 | C |
| ATOM | 11580 | OD1 | ASP D 217 | 32.140 | 76.538 | 76.559 | 1.00 | 20.89 | O |
| ATOM | 11581 | OD2 | ASP D 217 | 31.262 | 76.320 | 78.573 | 1.00 | 20.78 | O |
| ATOM | 11582 | N | VAL D 218 | 30.449 | 71.740 | 75.812 | 1.00 | 19.82 | N |
| ATOM | 11583 | CA | VAL D 218 | 30.540 | 70.291 | 75.656 | 1.00 | 18.79 | C |
| ATOM | 11584 | C | VAL D 218 | 30.711 | 69.956 | 74.177 | 1.00 | 21.62 | C |
| ATOM | 11585 | O | VAL D 218 | 31.392 | 68.988 | 73.821 | 1.00 | 22.36 | O |
| ATOM | 11586 | CB | VAL D 218 | 29.278 | 69.591 | 76.223 | 1.00 | 18.46 | C |
| ATOM | 11587 | CG1 | VAL D 218 | 29.258 | 68.107 | 75.831 | 1.00 | 14.75 | C |
| ATOM | 11588 | CG2 | VAL D 218 | 29.264 | 69.727 | 77.738 | 1.00 | 13.39 | C |
| ATOM | 11589 | N | ALA D 219 | 30.101 | 70.772 | 73.320 | 1.00 | 21.15 | N |
| ATOM | 11590 | CA | ALA D 219 | 30.194 | 70.581 | 71.877 | 1.00 | 23.02 | C |
| ATOM | 11591 | C | ALA D 219 | 31.481 | 71.233 | 71.360 | 1.00 | 22.91 | C |
| ATOM | 11592 | O | ALA D 219 | 31.761 | 71.216 | 70.163 | 1.00 | 23.06 | O |
| ATOM | 11593 | CB | ALA D 219 | 28.964 | 71.185 | 71.176 | 1.00 | 20.84 | C |
| ATOM | 11594 | N | ASP D 220 | 32.246 | 71.820 | 72.277 | 1.00 | 23.52 | N |
| ATOM | 11595 | CA | ASP D 220 | 33.518 | 72.459 | 71.958 | 1.00 | 21.64 | C |
| ATOM | 11596 | C | ASP D 220 | 33.487 | 73.490 | 70.814 | 1.00 | 22.05 | C |
| ATOM | 11597 | O | ASP D 220 | 34.330 | 73.460 | 69.916 | 1.00 | 23.16 | O |
| ATOM | 11598 | CB | ASP D 220 | 34.556 | 71.364 | 71.676 | 1.00 | 23.85 | C |
| ATOM | 11599 | CG | ASP D 220 | 35.949 | 71.913 | 71.422 | 1.00 | 26.53 | C |
| ATOM | 11600 | OD1 | ASP D 220 | 36.344 | 72.900 | 72.080 | 1.00 | 26.35 | O |
| ATOM | 11601 | OD2 | ASP D 220 | 36.660 | 71.338 | 70.569 | 1.00 | 31.08 | O |
| ATOM | 11602 | N | VAL D 221 | 32.511 | 74.395 | 70.850 | 1.00 | 21.60 | N |
| ATOM | 11603 | CA | VAL D 221 | 32.390 | 75.462 | 69.854 | 1.00 | 20.19 | C |
| ATOM | 11604 | C | VAL D 221 | 32.014 | 76.756 | 70.587 | 1.00 | 20.87 | C |
| ATOM | 11605 | O | VAL D 221 | 31.236 | 76.731 | 71.537 | 1.00 | 21.02 | O |
| ATOM | 11606 | CB | VAL D 221 | 31.306 | 75.157 | 68.774 | 1.00 | 20.57 | C |
| ATOM | 11607 | CG1 | VAL D 221 | 31.738 | 73.985 | 67.910 | 1.00 | 19.60 | C |
| ATOM | 11608 | CG2 | VAL D 221 | 29.969 | 74.858 | 69.434 | 1.00 | 19.05 | C |
| ATOM | 11609 | N | PRO D 222 | 32.568 | 77.902 | 70.151 | 1.00 | 21.23 | N |
| ATOM | 11610 | CA | PRO D 222 | 32.317 | 79.222 | 70.748 | 1.00 | 21.58 | C |
| ATOM | 11611 | C | PRO D 222 | 30.987 | 79.882 | 70.367 | 1.00 | 21.69 | C |
| ATOM | 11612 | O | PRO D 222 | 30.945 | 81.080 | 70.072 | 1.00 | 22.96 | O |
| ATOM | 11613 | CB | PRO D 222 | 33.514 | 80.039 | 70.262 | 1.00 | 21.49 | C |
| ATOM | 11614 | CG | PRO D 222 | 33.696 | 79.512 | 68.871 | 1.00 | 22.78 | C |
| ATOM | 11615 | CD | PRO D 222 | 33.585 | 77.999 | 69.084 | 1.00 | 21.54 | C |
| ATOM | 11616 | N | THR D 223 | 29.908 | 79.106 | 70.388 | 1.00 | 20.90 | N |
| ATOM | 11617 | CA | THR D 223 | 28.579 | 79.605 | 70.031 | 1.00 | 18.91 | C |
| ATOM | 11618 | C | THR D 223 | 28.255 | 80.934 | 70.699 | 1.00 | 19.95 | C |
| ATOM | 11619 | O | THR D 223 | 28.483 | 81.111 | 71.897 | 1.00 | 21.93 | O |
| ATOM | 11620 | CB | THR D 223 | 27.475 | 78.582 | 70.423 | 1.00 | 17.70 | C |
| ATOM | 11621 | OG1 | THR D 223 | 27.815 | 77.287 | 69.911 | 1.00 | 20.79 | O |
| ATOM | 11622 | CG2 | THR D 223 | 26.140 | 78.988 | 69.858 | 1.00 | 14.83 | C |
| ATOM | 11623 | N | VAL D 224 | 27.727 | 81.869 | 69.917 | 1.00 | 19.51 | N |
| ATOM | 11624 | CA | VAL D 224 | 27.344 | 83.169 | 70.441 | 1.00 | 19.82 | C |
| ATOM | 11625 | C | VAL D 224 | 26.006 | 82.994 | 71.157 | 1.00 | 21.77 | C |
| ATOM | 11626 | O | VAL D 224 | 25.020 | 82.543 | 70.559 | 1.00 | 21.45 | O |
| ATOM | 11627 | CB | VAL D 224 | 27.197 | 84.217 | 69.307 | 1.00 | 21.22 | C |
| ATOM | 11628 | CG1 | VAL D 224 | 26.503 | 85.473 | 69.834 | 1.00 | 21.18 | C |
| ATOM | 11629 | CG2 | VAL D 224 | 28.567 | 84.582 | 68.752 | 1.00 | 19.49 | C |
| ATOM | 11630 | N | VAL D 225 | 25.981 | 83.346 | 72.440 | 1.00 | 21.64 | N |
| ATOM | 11631 | CA | VAL D 225 | 24.784 | 83.216 | 73.256 | 1.00 | 20.79 | C |
| ATOM | 11632 | C | VAL D 225 | 24.112 | 84.564 | 73.471 | 1.00 | 22.13 | C |
| ATOM | 11633 | O | VAL D 225 | 24.727 | 85.503 | 73.980 | 1.00 | 24.14 | O |
| ATOM | 11634 | CB | VAL D 225 | 25.136 | 82.581 | 74.625 | 1.00 | 21.66 | C |
| ATOM | 11635 | CG1 | VAL D 225 | 23.913 | 82.557 | 75.538 | 1.00 | 20.94 | C |
| ATOM | 11636 | CG2 | VAL D 225 | 25.660 | 81.160 | 74.410 | 1.00 | 20.47 | C |
| ATOM | 11637 | N | ILE D 226 | 22.842 | 84.654 | 73.085 | 1.00 | 22.75 | N |
| ATOM | 11638 | CA | ILE D 226 | 22.079 | 85.895 | 73.224 | 1.00 | 22.38 | C |
| ATOM | 11639 | C | ILE D 226 | 20.954 | 85.810 | 74.253 | 1.00 | 23.97 | C |

| ATOM | 11640 | O | ILE D 226 | 20.102 | 84.918 | 74.187 | 1.00 | 23.89 | O |
|------|-------|------|-----------|--------|--------|--------|------|-------|---|
| ATOM | 11641 | CB | ILE D 226 | 21.452 | 86.300 | 71.877 | 1.00 | 22.20 | C |
| ATOM | 11642 | CG1 | ILE D 226 | 22.545 | 86.392 | 70.815 | 1.00 | 22.69 | C |
| ATOM | 11643 | CG2 | ILE D 226 | 20.717 | 87.625 | 72.019 | 1.00 | 18.38 | C |
| ATOM | 11644 | CD1 | ILE D 226 | 22.024 | 86.685 | 69.431 | 1.00 | 25.34 | C |
| ATOM | 11645 | N | ALA D 227 | 20.945 | 86.746 | 75.199 | 1.00 | 23.98 | N |
| ATOM | 11646 | CA | ALA D 227 | 19.904 | 86.775 | 76.216 | 1.00 | 22.52 | C |
| ATOM | 11647 | C | ALA D 227 | 18.862 | 87.813 | 75.823 | 1.00 | 23.17 | C |
| ATOM | 11648 | O | ALA D 227 | 19.209 | 88.939 | 75.466 | 1.00 | 23.50 | O |
| ATOM | 11649 | CB | ALA D 227 | 20.498 | 87.118 | 77.571 | 1.00 | 24.02 | C |
| ATOM | 11650 | N | ARG D 228 | 17.588 | 87.423 | 75.885 | 1.00 | 22.84 | N |
| ATOM | 11651 | CA | ARG D 228 | 16.475 | 88.304 | 75.542 | 1.00 | 20.52 | C |
| ATOM | 11652 | C | ARG D 228 | 15.473 | 88.416 | 76.683 | 1.00 | 21.15 | C |
| ATOM | 11653 | O | ARG D 228 | 15.079 | 87.411 | 77.279 | 1.00 | 21.19 | O |
| ATOM | 11654 | CB | ARG D 228 | 15.744 | 87.790 | 74.296 | 1.00 | 21.36 | C |
| ATOM | 11655 | CG | ARG D 228 | 14.291 | 88.279 | 74.204 | 1.00 | 21.93 | C |
| ATOM | 11656 | CD | ARG D 228 | 13.564 | 87.754 | 72.976 | 1.00 | 22.67 | C |
| ATOM | 11657 | NE | ARG D 228 | 12.119 | 87.727 | 73.195 | 1.00 | 22.77 | N |
| ATOM | 11658 | CZ | ARG D 228 | 11.220 | 87.471 | 72.251 | 1.00 | 24.56 | C |
| ATOM | 11659 | NH1 | ARG D 228 | 11.613 | 87.221 | 71.011 | 1.00 | 26.62 | N |
| ATOM | 11660 | NH2 | ARG D 228 | 9.926 | 87.454 | 72.548 | 1.00 | 25.20 | N |
| ATOM | 11661 | N | THR D 229 | 15.054 | 89.637 | 76.988 | 1.00 | 19.71 | N |
| ATOM | 11662 | CA | THR D 229 | 14.080 | 89.830 | 78.043 | 1.00 | 22.18 | C |
| ATOM | 11663 | C | THR D 229 | 12.770 | 90.336 | 77.463 | 1.00 | 22.63 | C |
| ATOM | 11664 | O | THR D 229 | 12.769 | 91.170 | 76.558 | 1.00 | 24.26 | O |
| ATOM | 11665 | CB | THR D 229 | 14.575 | 90.838 | 79.109 | 1.00 | 23.75 | C |
| ATOM | 11666 | OG1 | THR D 229 | 13.587 | 90.953 | 80.143 | 1.00 | 22.75 | O |
| ATOM | 11667 | CG2 | THR D 229 | 14.814 | 92.221 | 78.487 | 1.00 | 24.66 | C |
| ATOM | 11668 | N | ASP D 230 | 11.660 | 89.823 | 77.985 | 1.00 | 22.78 | N |
| ATOM | 11669 | CA | ASP D 230 | 10.330 | 90.226 | 77.539 | 1.00 | 25.13 | C |
| ATOM | 11670 | C | ASP D 230 | 9.611 | 91.002 | 78.642 | 1.00 | 26.80 | C |
| ATOM | 11671 | O | ASP D 230 | 8.387 | 91.133 | 78.622 | 1.00 | 25.77 | O |
| ATOM | 11672 | CB | ASP D 230 | 9.500 | 88.995 | 77.161 | 1.00 | 24.97 | C |
| ATOM | 11673 | CG | ASP D 230 | 9.883 | 88.424 | 75.806 | 1.00 | 26.62 | C |
| ATOM | 11674 | OD1 | ASP D 230 | 9.517 | 89.038 | 74.781 | 1.00 | 27.54 | O |
| ATOM | 11675 | OD2 | ASP D 230 | 10.550 | 87.366 | 75.765 | 1.00 | 25.70 | O |
| ATOM | 11676 | N | ALA D 231 | 10.382 | 91.521 | 79.595 | 1.00 | 28.49 | N |
| ATOM | 11677 | CA | ALA D 231 | 9.831 | 92.268 | 80.727 | 1.00 | 30.32 | C |
| ATOM | 11678 | C | ALA D 231 | 9.249 | 93.641 | 80.382 | 1.00 | 30.73 | C |
| ATOM | 11679 | O | ALA D 231 | 8.535 | 94.232 | 81.194 | 1.00 | 28.99 | O |
| ATOM | 11680 | CB | ALA D 231 | 10.900 | 92.424 | 81.813 | 1.00 | 30.82 | C |
| ATOM | 11681 | N | GLU D 232 | 9.549 | 94.145 | 79.188 | 1.00 | 31.13 | N |
| ATOM | 11682 | CA | GLU D 232 | 9.049 | 95.454 | 78.778 | 1.00 | 31.90 | C |
| ATOM | 11683 | C | GLU D 232 | 7.521 | 95.484 | 78.744 | 1.00 | 31.10 | C |
| ATOM | 11684 | O | GLU D 232 | 6.909 | 96.457 | 79.184 | 1.00 | 31.78 | O |
| ATOM | 11685 | CB | GLU D 232 | 9.620 | 95.829 | 77.404 | 1.00 | 33.37 | C |
| ATOM | 11686 | CG | GLU D 232 | 9.473 | 97.301 | 77.023 | 1.00 | 37.29 | C |
| ATOM | 11687 | CD | GLU D 232 | 8.134 | 97.629 | 76.382 | 1.00 | 39.92 | C |
| ATOM | 11688 | OE1 | GLU D 232 | 7.845 | 97.097 | 75.289 | 1.00 | 42.92 | O |
| ATOM | 11689 | OE2 | GLU D 232 | 7.370 | 98.423 | 76.967 | 1.00 | 41.73 | O |
| ATOM | 11690 | N | ALA D 233 | 6.903 | 94.413 | 78.251 | 1.00 | 29.32 | N |
| ATOM | 11691 | CA | ALA D 233 | 5.446 | 94.364 | 78.165 | 1.00 | 29.42 | C |
| ATOM | 11692 | C | ALA D 233 | 4.783 | 93.335 | 79.077 | 1.00 | 28.57 | C |
| ATOM | 11693 | O | ALA D 233 | 3.603 | 93.463 | 79.395 | 1.00 | 29.96 | O |
| ATOM | 11694 | CB | ALA D 233 | 5.019 | 94.115 | 76.720 | 1.00 | 28.97 | C |
| ATOM | 11695 | N | ALA D 234 | 5.532 | 92.323 | 79.499 | 1.00 | 27.42 | N |
| ATOM | 11696 | CA | ALA D 234 | 4.979 | 91.281 | 80.362 | 1.00 | 27.98 | C |
| ATOM | 11697 | C | ALA D 234 | 4.497 | 91.812 | 81.712 | 1.00 | 27.96 | C |
| ATOM | 11698 | O | ALA D 234 | 5.260 | 92.434 | 82.456 | 1.00 | 27.97 | O |
| ATOM | 11699 | CB | ALA D 234 | 6.007 | 90.176 | 80.572 | 1.00 | 25.86 | C |
| ATOM | 11700 | N | THR D 235 | 3.223 | 91.568 | 82.015 | 1.00 | 28.35 | N |
| ATOM | 11701 | CA | THR D 235 | 2.628 | 92.007 | 83.279 | 1.00 | 29.10 | C |
| ATOM | 11702 | C | THR D 235 | 2.425 | 90.821 | 84.212 | 1.00 | 28.95 | C |
| ATOM | 11703 | O | THR D 235 | 1.693 | 90.920 | 85.198 | 1.00 | 29.93 | O |
| ATOM | 11704 | CB | THR D 235 | 1.245 | 92.666 | 83.076 | 1.00 | 30.35 | C |
| ATOM | 11705 | OG1 | THR D 235 | 0.362 | 91.734 | 82.438 | 1.00 | 31.71 | O |
| ATOM | 11706 | CG2 | THR D 235 | 1.361 | 93.924 | 82.234 | 1.00 | 29.12 | C |
| ATOM | 11707 | N | LEU D 236 | 3.072 | 89.703 | 83.891 | 1.00 | 28.94 | N |
| ATOM | 11708 | CA | LEU D 236 | 2.955 | 88.490 | 84.690 | 1.00 | 27.50 | C |
| ATOM | 11709 | C | LEU D 236 | 4.279 | 87.761 | 84.853 | 1.00 | 26.49 | C |
| ATOM | 11710 | O | LEU D 236 | 5.134 | 87.789 | 83.970 | 1.00 | 24.73 | O |
| ATOM | 11711 | CB | LEU D 236 | 1.947 | 87.537 | 84.051 | 1.00 | 26.69 | C |
| ATOM | 11712 | CG | LEU D 236 | 0.505 | 88.022 | 83.965 | 1.00 | 26.58 | C |
| ATOM | 11713 | CD1 | LEU D 236 | -0.286 | 87.075 | 83.086 | 1.00 | 27.90 | C |
| ATOM | 11714 | CD2 | LEU D 236 | -0.101 | 88.103 | 85.358 | 1.00 | 26.07 | C |
| ATOM | 11715 | N | ILE D 237 | 4.433 | 87.103 | 85.995 | 1.00 | 25.28 | N |
| ATOM | 11716 | CA | ILE D 237 | 5.630 | 86.337 | 86.280 | 1.00 | 26.29 | C |
| ATOM | 11717 | C | ILE D 237 | 5.183 | 85.112 | 87.063 | 1.00 | 26.74 | C |
| ATOM | 11718 | O | ILE D 237 | 4.249 | 85.180 | 87.865 | 1.00 | 28.13 | O |
| ATOM | 11719 | CB | ILE D 237 | 6.658 | 87.166 | 87.084 | 1.00 | 26.48 | C |

| ATOM | 11720 | CG1 | ILE | D | 237 | 7.967 | 86.386 | 87.205 | 1.00 | 27.06 | C |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 11721 | CG2 | ILE | D | 237 | 6.098 | 87.518 | 88.447 | 1.00 | 28.36 | C |
| ATOM | 11722 | CD1 | ILE | D | 237 | 9.110 | 87.196 | 87.804 | 1.00 | 26.91 | C |
| ATOM | 11723 | N | THR | D | 238 | 5.837 | 83.987 | 86.815 | 1.00 | 25.61 | N |
| ATOM | 11724 | CA | THR | D | 238 | 5.471 | 82.741 | 87.465 | 1.00 | 24.82 | C |
| ATOM | 11725 | C | THR | D | 238 | 5.704 | 82.697 | 88.959 | 1.00 | 26.13 | C |
| ATOM | 11726 | O | THR | D | 238 | 4.944 | 82.054 | 89.683 | 1.00 | 27.02 | O |
| ATOM | 11727 | CB | THR | D | 238 | 6.233 | 81.567 | 86.857 | 1.00 | 25.07 | C |
| ATOM | 11728 | OG1 | THR | D | 238 | 7.637 | 81.802 | 87.002 | 1.00 | 23.29 | O |
| ATOM | 11729 | CG2 | THR | D | 238 | 5.881 | 81.404 | 85.377 | 1.00 | 22.18 | C |
| ATOM | 11730 | N | SER | D | 239 | 6.749 | 83.371 | 89.429 | 1.00 | 26.53 | N |
| ATOM | 11731 | CA | SER | D | 239 | 7.069 | 83.339 | 90.850 | 1.00 | 27.39 | C |
| ATOM | 11732 | C | SER | D | 239 | 7.752 | 84.599 | 91.359 | 1.00 | 28.80 | C |
| ATOM | 11733 | O | SER | D | 239 | 8.360 | 85.350 | 90.591 | 1.00 | 28.15 | O |
| ATOM | 11734 | CB | SER | D | 239 | 7.957 | 82.120 | 91.139 | 1.00 | 26.62 | C |
| ATOM | 11735 | OG | SER | D | 239 | 8.345 | 82.052 | 92.496 | 1.00 | 25.91 | O |
| ATOM | 11736 | N | ASP | D | 240 | 7.651 | 84.815 | 92.667 | 1.00 | 29.33 | N |
| ATOM | 11737 | CA | ASP | D | 240 | 8.258 | 85.972 | 93.306 | 1.00 | 30.31 | C |
| ATOM | 11738 | C | ASP | D | 240 | 9.416 | 85.507 | 94.180 | 1.00 | 30.78 | C |
| ATOM | 11739 | O | ASP | D | 240 | 9.836 | 86.213 | 95.096 | 1.00 | 32.07 | O |
| ATOM | 11740 | CB | ASP | D | 240 | 7.211 | 86.701 | 94.152 | 1.00 | 31.05 | C |
| ATOM | 11741 | CG | ASP | D | 240 | 6.725 | 85.871 | 95.328 | 1.00 | 32.55 | C |
| ATOM | 11742 | OD1 | ASP | D | 240 | 6.707 | 84.624 | 95.228 | 1.00 | 33.41 | O |
| ATOM | 11743 | OD2 | ASP | D | 240 | 6.343 | 86.472 | 96.353 | 1.00 | 34.19 | O |
| ATOM | 11744 | N | VAL | D | 241 | 9.927 | 84.315 | 93.878 | 1.00 | 30.08 | N |
| ATOM | 11745 | CA | VAL | D | 241 | 11.035 | 83.717 | 94.621 | 1.00 | 30.27 | C |
| ATOM | 11746 | C | VAL | D | 241 | 12.367 | 84.461 | 94.473 | 1.00 | 29.91 | C |
| ATOM | 11747 | O | VAL | D | 241 | 13.181 | 84.465 | 95.400 | 1.00 | 30.49 | O |
| ATOM | 11748 | CB | VAL | D | 241 | 11.250 | 82.235 | 94.201 | 1.00 | 31.36 | C |
| ATOM | 11749 | CG1 | VAL | D | 241 | 11.698 | 82.162 | 92.747 | 1.00 | 30.40 | C |
| ATOM | 11750 | CG2 | VAL | D | 241 | 12.277 | 81.577 | 95.107 | 1.00 | 31.44 | C |
| ATOM | 11751 | N | ASP | D | 242 | 12.600 | 85.084 | 93.318 | 1.00 | 29.38 | N |
| ATOM | 11752 | CA | ASP | D | 242 | 13.848 | 85.815 | 93.110 | 1.00 | 29.93 | C |
| ATOM | 11753 | C | ASP | D | 242 | 13.726 | 87.230 | 93.659 | 1.00 | 31.76 | C |
| ATOM | 11754 | O | ASP | D | 242 | 12.821 | 87.978 | 93.288 | 1.00 | 32.50 | O |
| ATOM | 11755 | CB | ASP | D | 242 | 14.215 | 85.870 | 91.624 | 1.00 | 28.18 | C |
| ATOM | 11756 | CG | ASP | D | 242 | 15.672 | 86.259 | 91.398 | 1.00 | 27.74 | C |
| ATOM | 11757 | OD1 | ASP | D | 242 | 16.103 | 87.305 | 91.929 | 1.00 | 29.77 | O |
| ATOM | 11758 | OD2 | ASP | D | 242 | 16.390 | 85.522 | 90.689 | 1.00 | 25.36 | O |
| ATOM | 11759 | N | GLU | D | 243 | 14.644 | 87.592 | 94.545 | 1.00 | 32.28 | N |
| ATOM | 11760 | CA | GLU | D | 243 | 14.628 | 88.911 | 95.156 | 1.00 | 33.43 | C |
| ATOM | 11761 | C | GLU | D | 243 | 14.822 | 90.043 | 94.163 | 1.00 | 32.29 | C |
| ATOM | 11762 | O | GLU | D | 243 | 14.395 | 91.172 | 94.415 | 1.00 | 32.70 | O |
| ATOM | 11763 | CB | GLU | D | 243 | 15.684 | 88.981 | 96.260 | 1.00 | 35.73 | C |
| ATOM | 11764 | CG | GLU | D | 243 | 15.320 | 88.117 | 97.461 | 1.00 | 41.39 | C |
| ATOM | 11765 | CD | GLU | D | 243 | 16.377 | 88.126 | 98.546 | 1.00 | 45.61 | C |
| ATOM | 11766 | OE1 | GLU | D | 243 | 16.754 | 89.231 | 99.000 | 1.00 | 46.90 | O |
| ATOM | 11767 | OE2 | GLU | D | 243 | 16.823 | 87.024 | 98.946 | 1.00 | 46.05 | O |
| ATOM | 11768 | N | ARG | D | 244 | 15.456 | 89.752 | 93.033 | 1.00 | 30.33 | N |
| ATOM | 11769 | CA | ARG | D | 244 | 15.677 | 90.785 | 92.025 | 1.00 | 29.46 | C |
| ATOM | 11770 | C | ARG | D | 244 | 14.390 | 91.143 | 91.277 | 1.00 | 27.66 | C |
| ATOM | 11771 | O | ARG | D | 244 | 14.328 | 92.160 | 90.593 | 1.00 | 28.28 | O |
| ATOM | 11772 | CB | ARG | D | 244 | 16.761 | 90.336 | 91.040 | 1.00 | 29.11 | C |
| ATOM | 11773 | CG | ARG | D | 244 | 18.165 | 90.376 | 91.627 | 1.00 | 26.40 | C |
| ATOM | 11774 | CD | ARG | D | 244 | 19.147 | 89.568 | 90.799 | 1.00 | 28.02 | C |
| ATOM | 11775 | NE | ARG | D | 244 | 18.746 | 88.167 | 90.733 | 1.00 | 27.64 | N |
| ATOM | 11776 | CZ | ARG | D | 244 | 19.487 | 87.203 | 90.202 | 1.00 | 27.30 | C |
| ATOM | 11777 | NH1 | ARG | D | 244 | 20.676 | 87.488 | 89.691 | 1.00 | 27.53 | N |
| ATOM | 11778 | NH2 | ARG | D | 244 | 19.036 | 85.957 | 90.180 | 1.00 | 27.50 | N |
| ATOM | 11779 | N | ASP | D | 245 | 13.361 | 90.313 | 91.426 | 1.00 | 26.61 | N |
| ATOM | 11780 | CA | ASP | D | 245 | 12.086 | 90.550 | 90.760 | 1.00 | 26.13 | C |
| ATOM | 11781 | C | ASP | D | 245 | 11.010 | 91.102 | 91.690 | 1.00 | 26.20 | C |
| ATOM | 11782 | O | ASP | D | 245 | 10.055 | 91.723 | 91.235 | 1.00 | 28.12 | O |
| ATOM | 11783 | CB | ASP | D | 245 | 11.564 | 89.256 | 90.133 | 1.00 | 25.98 | C |
| ATOM | 11784 | CG | ASP | D | 245 | 12.577 | 88.599 | 89.218 | 1.00 | 27.35 | C |
| ATOM | 11785 | OD1 | ASP | D | 245 | 13.185 | 89.318 | 88.392 | 1.00 | 25.73 | O |
| ATOM | 11786 | OD2 | ASP | D | 245 | 12.751 | 87.362 | 89.322 | 1.00 | 25.93 | O |
| ATOM | 11787 | N | GLN | D | 246 | 11.157 | 90.873 | 92.988 | 1.00 | 26.50 | N |
| ATOM | 11788 | CA | GLN | D | 246 | 10.169 | 91.340 | 93.954 | 1.00 | 27.87 | C |
| ATOM | 11789 | C | GLN | D | 246 | 9.874 | 92.851 | 93.905 | 1.00 | 28.82 | C |
| ATOM | 11790 | O | GLN | D | 246 | 8.747 | 93.275 | 94.147 | 1.00 | 27.87 | O |
| ATOM | 11791 | CB | GLN | D | 246 | 10.594 | 90.920 | 95.363 | 1.00 | 27.84 | C |
| ATOM | 11792 | CG | GLN | D | 246 | 10.766 | 89.412 | 95.504 | 1.00 | 29.37 | C |
| ATOM | 11793 | CD | GLN | D | 246 | 11.303 | 88.991 | 96.865 | 1.00 | 31.63 | C |
| ATOM | 11794 | OE1 | GLN | D | 246 | 11.907 | 89.791 | 97.584 | 1.00 | 32.79 | O |
| ATOM | 11795 | NE2 | GLN | D | 246 | 11.106 | 87.720 | 97.213 | 1.00 | 29.29 | N |
| ATOM | 11796 | N | PRO | D | 247 | 10.876 | 93.683 | 93.581 | 1.00 | 29.73 | N |
| ATOM | 11797 | CA | PRO | D | 247 | 10.573 | 95.117 | 93.537 | 1.00 | 30.05 | C |
| ATOM | 11798 | C | PRO | D | 247 | 9.462 | 95.446 | 92.545 | 1.00 | 30.27 | C |
| ATOM | 11799 | O | PRO | D | 247 | 8.797 | 96.476 | 92.656 | 1.00 | 31.02 | O |

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ATOM  11800  CB   PRO D 247     11.902  95.737  93.122  1.00 28.84      C
ATOM  11801  CG   PRO D 247     12.902  94.805  93.713  1.00 29.80      C
ATOM  11802  CD   PRO D 247     12.315  93.451  93.374  1.00 29.60      C
ATOM  11803  N    PHE D 248      9.256  94.558  91.582  1.00 29.47      N
ATOM  11804  CA   PHE D 248      8.249  94.780  90.559  1.00 30.08      C
ATOM  11805  C    PHE D 248      6.949  94.031  90.794  1.00 31.51      C
ATOM  11806  O    PHE D 248      5.961  94.292  90.110  1.00 32.39      O
ATOM  11807  CB   PHE D 248      8.826  94.398  89.197  1.00 30.01      C
ATOM  11808  CG   PHE D 248     10.127  95.077  88.888  1.00 29.85      C
ATOM  11809  CD1  PHE D 248     10.158  96.418  88.522  1.00 30.86      C
ATOM  11810  CD2  PHE D 248     11.328  94.388  89.008  1.00 29.34      C
ATOM  11811  CE1  PHE D 248     11.371  97.066  88.282  1.00 30.29      C
ATOM  11812  CE2  PHE D 248     12.546  95.022  88.772  1.00 29.65      C
ATOM  11813  CZ   PHE D 248     12.569  96.365  88.408  1.00 30.51      C
ATOM  11814  N    ILE D 249      6.942  93.113  91.757  1.00 32.38      N
ATOM  11815  CA   ILE D 249      5.746  92.326  92.051  1.00 34.39      C
ATOM  11816  C    ILE D 249      4.676  93.160  92.763  1.00 36.11      C
ATOM  11817  O    ILE D 249      4.958  93.806  93.772  1.00 36.26      O
ATOM  11818  CB   ILE D 249      6.090  91.100  92.928  1.00 33.97      C
ATOM  11819  CG1  ILE D 249      7.180  90.259  92.254  1.00 35.07      C
ATOM  11820  CG2  ILE D 249      4.848  90.253  93.143  1.00 33.65      C
ATOM  11821  CD1  ILE D 249      6.813  89.753  90.879  1.00 34.53      C
ATOM  11822  N    THR D 250      3.448  93.128  92.244  1.00 36.31      N
ATOM  11823  CA   THR D 250      2.345  93.896  92.824  1.00 38.60      C
ATOM  11824  C    THR D 250      1.612  93.222  93.987  1.00 40.60      C
ATOM  11825  O    THR D 250      0.929  93.894  94.761  1.00 42.10      O
ATOM  11826  CB   THR D 250      1.283  94.237  91.771  1.00 38.56      C
ATOM  11827  OG1  THR D 250      0.555  93.050  91.428  1.00 39.30      O
ATOM  11828  CG2  THR D 250      1.935  94.809  90.524  1.00 38.83      C
ATOM  11829  N    GLY D 251      1.734  91.902  94.103  1.00 41.94      N
ATOM  11830  CA   GLY D 251      1.065  91.199  95.185  1.00 42.06      C
ATOM  11831  C    GLY D 251     -0.197  90.485  94.738  1.00 42.87      C
ATOM  11832  O    GLY D 251     -0.653  89.541  95.385  1.00 43.33      O
ATOM  11833  N    GLU D 252     -0.767  90.939  93.628  1.00 43.12      N
ATOM  11834  CA   GLU D 252     -1.973  90.328  93.082  1.00 43.82      C
ATOM  11835  C    GLU D 252     -1.613  89.007  92.399  1.00 43.56      C
ATOM  11836  O    GLU D 252     -0.487  88.825  91.931  1.00 43.33      O
ATOM  11837  CB   GLU D 252     -2.608  91.264  92.065  1.00 44.88      C
ATOM  11838  CG   GLU D 252     -2.580  92.716  92.484  1.00 48.61      C
ATOM  11839  CD   GLU D 252     -2.858  93.642  91.322  1.00 51.86      C
ATOM  11840  OE1  GLU D 252     -4.017  93.678  90.853  1.00 54.12      O
ATOM  11841  OE2  GLU D 252     -1.910  94.320  90.866  1.00 52.49      O
ATOM  11842  N    ARG D 253     -2.580  88.098  92.336  1.00 43.17      N
ATOM  11843  CA   ARG D 253     -2.379  86.789  91.722  1.00 42.94      C
ATOM  11844  C    ARG D 253     -3.561  86.424  90.827  1.00 42.51      C
ATOM  11845  O    ARG D 253     -4.711  86.737  91.145  1.00 43.44      O
ATOM  11846  CB   ARG D 253     -2.219  85.730  92.816  1.00 43.44      C
ATOM  11847  CG   ARG D 253     -1.011  85.936  93.713  1.00 44.00      C
ATOM  11848  CD   ARG D 253      0.183  85.124  93.232  1.00 45.19      C
ATOM  11849  NE   ARG D 253      0.065  83.698  93.544  1.00 46.34      N
ATOM  11850  CZ   ARG D 253     -0.003  83.205  94.778  1.00 46.50      C
ATOM  11851  NH1  ARG D 253      0.033  84.024  95.818  1.00 47.95      N
ATOM  11852  NH2  ARG D 253     -0.102  81.896  94.977  1.00 47.55      N
ATOM  11853  N    THR D 254     -3.281  85.764  89.708  1.00 41.08      N
ATOM  11854  CA   THR D 254     -4.336  85.353  88.790  1.00 39.45      C
ATOM  11855  C    THR D 254     -4.864  83.992  89.238  1.00 39.62      C
ATOM  11856  O    THR D 254     -4.287  83.358  90.119  1.00 38.73      O
ATOM  11857  CB   THR D 254     -3.813  85.235  87.337  1.00 39.73      C
ATOM  11858  OG1  THR D 254     -2.935  84.109  87.229  1.00 38.20      O
ATOM  11859  CG2  THR D 254     -3.056  86.500  86.940  1.00 38.55      C
ATOM  11860  N    ARG D 255     -5.962  83.547  88.637  1.00 40.40      N
ATOM  11861  CA   ARG D 255     -6.547  82.257  88.986  1.00 41.16      C
ATOM  11862  C    ARG D 255     -5.560  81.115  88.750  1.00 39.76      C
ATOM  11863  O    ARG D 255     -5.628  80.084  89.419  1.00 39.14      O
ATOM  11864  CB   ARG D 255     -7.818  82.004  88.167  1.00 44.51      C
ATOM  11865  CG   ARG D 255     -8.903  83.055  88.347  1.00 49.92      C
ATOM  11866  CD   ARG D 255    -10.138  82.751  87.499  1.00 54.81      C
ATOM  11867  NE   ARG D 255    -10.873  81.582  87.981  1.00 59.19      N
ATOM  11868  CZ   ARG D 255    -11.443  81.497  89.181  1.00 61.35      C
ATOM  11869  NH1  ARG D 255    -11.367  82.516  90.028  1.00 62.45      N
ATOM  11870  NH2  ARG D 255    -12.089  80.391  89.537  1.00 61.75      N
ATOM  11871  N    GLU D 256     -4.644  81.297  87.800  1.00 38.19      N
ATOM  11872  CA   GLU D 256     -3.661  80.257  87.494  1.00 36.32      C
ATOM  11873  C    GLU D 256     -2.514  80.241  88.504  1.00 36.20      C
ATOM  11874  O    GLU D 256     -1.713  79.302  88.538  1.00 35.30      O
ATOM  11875  CB   GLU D 256     -3.104  80.440  86.075  1.00 34.48      C
ATOM  11876  CG   GLU D 256     -4.161  80.358  84.979  1.00 32.53      C
ATOM  11877  CD   GLU D 256     -4.627  81.725  84.510  1.00 33.60      C
ATOM  11878  OE1  GLU D 256     -4.811  82.626  85.356  1.00 35.04      O
ATOM  11879  OE2  GLU D 256     -4.817  81.899  83.289  1.00 34.64      O
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|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 11880 | N | GLY | D | 257 | -2.443 | 81.283 | 89.329 | 1.00 35.13 | N |
| ATOM | 11881 | CA | GLY | D | 257 | -1.391 | 81.365 | 90.324 | 1.00 33.40 | C |
| ATOM | 11882 | C | GLY | D | 257 | -0.236 | 82.264 | 89.922 | 1.00 34.40 | C |
| ATOM | 11883 | O | GLY | D | 257 | 0.770 | 82.346 | 90.636 | 1.00 35.20 | O |
| ATOM | 11884 | N | PHE | D | 258 | -0.359 | 82.942 | 88.782 | 1.00 33.41 | N |
| ATOM | 11885 | CA | PHE | D | 258 | 0.706 | 83.837 | 88.333 | 1.00 31.74 | C |
| ATOM | 11886 | C | PHE | D | 258 | 0.705 | 85.101 | 89.186 | 1.00 31.60 | C |
| ATOM | 11887 | O | PHE | D | 258 | -0.318 | 85.461 | 89.766 | 1.00 32.25 | O |
| ATOM | 11888 | CB | PHE | D | 258 | 0.509 | 84.232 | 86.865 | 1.00 30.81 | C |
| ATOM | 11889 | CG | PHE | D | 258 | 0.490 | 83.068 | 85.912 | 1.00 30.27 | C |
| ATOM | 11890 | CD1 | PHE | D | 258 | 1.422 | 82.041 | 86.023 | 1.00 30.43 | C |
| ATOM | 11891 | CD2 | PHE | D | 258 | -0.441 | 83.017 | 84.879 | 1.00 29.45 | C |
| ATOM | 11892 | CE1 | PHE | D | 258 | 1.430 | 80.976 | 85.116 | 1.00 30.06 | C |
| ATOM | 11893 | CE2 | PHE | D | 258 | -0.441 | 81.954 | 83.965 | 1.00 29.97 | C |
| ATOM | 11894 | CZ | PHE | D | 258 | 0.498 | 80.934 | 84.086 | 1.00 27.42 | C |
| ATOM | 11895 | N | TYR | D | 259 | 1.853 | 85.767 | 89.264 | 1.00 30.95 | N |
| ATOM | 11896 | CA | TYR | D | 259 | 1.963 | 87.006 | 90.026 | 1.00 31.21 | C |
| ATOM | 11897 | C | TYR | D | 259 | 1.969 | 88.197 | 89.072 | 1.00 32.44 | C |
| ATOM | 11898 | O | TYR | D | 259 | 2.672 | 88.177 | 88.059 | 1.00 33.20 | O |
| ATOM | 11899 | CB | TYR | D | 259 | 3.264 | 87.043 | 90.837 | 1.00 31.34 | C |
| ATOM | 11900 | CG | TYR | D | 259 | 3.363 | 86.027 | 91.950 | 1.00 29.84 | C |
| ATOM | 11901 | CD1 | TYR | D | 259 | 3.521 | 84.669 | 91.673 | 1.00 28.68 | C |
| ATOM | 11902 | CD2 | TYR | D | 259 | 3.312 | 86.427 | 93.286 | 1.00 31.29 | C |
| ATOM | 11903 | CE1 | TYR | D | 259 | 3.629 | 83.733 | 92.701 | 1.00 28.93 | C |
| ATOM | 11904 | CE2 | TYR | D | 259 | 3.420 | 85.498 | 94.325 | 1.00 30.13 | C |
| ATOM | 11905 | CZ | TYR | D | 259 | 3.579 | 84.154 | 94.024 | 1.00 30.75 | C |
| ATOM | 11906 | OH | TYR | D | 259 | 3.706 | 83.236 | 95.046 | 1.00 32.29 | O |
| ATOM | 11907 | N | ARG | D | 260 | 1.182 | 89.224 | 89.383 | 1.00 32.54 | N |
| ATOM | 11908 | CA | ARG | D | 260 | 1.155 | 90.427 | 88.560 | 1.00 32.38 | C |
| ATOM | 11909 | C | ARG | D | 260 | 2.477 | 91.131 | 88.826 | 1.00 32.51 | C |
| ATOM | 11910 | O | ARG | D | 260 | 2.914 | 91.201 | 89.974 | 1.00 32.43 | O |
| ATOM | 11911 | CB | ARG | D | 260 | 0.013 | 91.354 | 88.979 | 1.00 33.98 | C |
| ATOM | 11912 | CG | ARG | D | 260 | -1.375 | 90.902 | 88.566 | 1.00 36.95 | C |
| ATOM | 11913 | CD | ARG | D | 260 | -1.585 | 91.053 | 87.072 | 1.00 39.61 | C |
| ATOM | 11914 | NE | ARG | D | 260 | -2.890 | 90.536 | 86.665 | 1.00 44.17 | N |
| ATOM | 11915 | CZ | ARG | D | 260 | -3.283 | 90.411 | 85.401 | 1.00 45.12 | C |
| ATOM | 11916 | NH1 | ARG | D | 260 | -2.474 | 90.768 | 84.409 | 1.00 46.65 | N |
| ATOM | 11917 | NH2 | ARG | D | 260 | -4.482 | 89.915 | 85.129 | 1.00 45.23 | N |
| ATOM | 11918 | N | THR | D | 261 | 3.113 | 91.642 | 87.774 | 1.00 32.87 | N |
| ATOM | 11919 | CA | THR | D | 261 | 4.385 | 92.352 | 87.919 | 1.00 32.90 | C |
| ATOM | 11920 | C | THR | D | 261 | 4.370 | 93.632 | 87.091 | 1.00 33.87 | C |
| ATOM | 11921 | O | THR | D | 261 | 3.706 | 93.699 | 86.055 | 1.00 33.89 | O |
| ATOM | 11922 | CB | THR | D | 261 | 5.576 | 91.479 | 87.468 | 1.00 31.51 | C |
| ATOM | 11923 | OG1 | THR | D | 261 | 6.793 | 92.221 | 87.603 | 1.00 30.18 | O |
| ATOM | 11924 | CG2 | THR | D | 261 | 5.407 | 91.061 | 86.020 | 1.00 31.16 | C |
| ATOM | 11925 | N | LYS | D | 262 | 5.109 | 94.642 | 87.547 | 1.00 34.79 | N |
| ATOM | 11926 | CA | LYS | D | 262 | 5.168 | 95.927 | 86.857 | 1.00 35.48 | C |
| ATOM | 11927 | C | LYS | D | 262 | 6.136 | 95.921 | 85.682 | 1.00 34.05 | C |
| ATOM | 11928 | O | LYS | D | 262 | 7.350 | 95.847 | 85.868 | 1.00 33.80 | O |
| ATOM | 11929 | CB | LYS | D | 262 | 5.554 | 97.035 | 87.844 | 1.00 37.82 | C |
| ATOM | 11930 | CG | LYS | D | 262 | 4.572 | 97.193 | 88.997 | 1.00 41.01 | C |
| ATOM | 11931 | CD | LYS | D | 262 | 4.858 | 98.445 | 89.814 | 1.00 43.82 | C |
| ATOM | 11932 | CE | LYS | D | 262 | 3.838 | 98.620 | 90.934 | 1.00 45.59 | C |
| ATOM | 11933 | NZ | LYS | D | 262 | 2.441 | 98.703 | 90.420 | 1.00 46.39 | N |
| ATOM | 11934 | N | ASN | D | 263 | 5.586 | 96.014 | 84.475 | 1.00 33.89 | N |
| ATOM | 11935 | CA | ASN | D | 263 | 6.383 | 96.009 | 83.247 | 1.00 34.25 | C |
| ATOM | 11936 | C | ASN | D | 263 | 6.976 | 97.382 | 82.931 | 1.00 34.38 | C |
| ATOM | 11937 | O | ASN | D | 263 | 6.580 | 98.389 | ,83.510 | 1.00 35.86 | O |
| ATOM | 11938 | CB | ASN | D | 263 | 5.526 | 95.542 | 82.062 | 1.00 35.42 | C |
| ATOM | 11939 | CG | ASN | D | 263 | 4.412 | 96.526 | 81.710 | 1.00 37.95 | C |
| ATOM | 11940 | OD1 | ASN | D | 263 | 3.457 | 96.706 | 82.465 | 1.00 39.45 | O |
| ATOM | 11941 | ND2 | ASN | D | 263 | 4.537 | 97.165 | 80.557 | 1.00 39.13 | N |
| ATOM | 11942 | N | GLY | D | 264 | 7.927 | 97.417 | 82.005 | 1.00 33.29 | N |
| ATOM | 11943 | CA | GLY | D | 264 | 8.545 | 98.674 | 81.638 | 1.00 32.36 | C |
| ATOM | 11944 | C | GLY | D | 264 | 10.010 | 98.473 | 81.345 | 1.00 32.44 | C |
| ATOM | 11945 | O | GLY | D | 264 | 10.496 | 97.345 | 81.358 | 1.00 33.12 | O |
| ATOM | 11946 | N | ILE | D | 265 | 10.722 | 99.562 | 81.087 | 1.00 33.15 | N |
| ATOM | 11947 | CA | ILE | D | 265 | 12.144 | 99.469 | 80.788 | 1.00 34.28 | C |
| ATOM | 11948 | C | ILE | D | 265 | 12.957 | 99.178 | 82.046 | 1.00 34.47 | C |
| ATOM | 11949 | O | ILE | D | 265 | 14.029 | 98.572 | 81.982 | 1.00 35.86 | O |
| ATOM | 11950 | CB | ILE | D | 265 | 12.657 | 100.771 | 80.135 | 1.00 34.58 | C |
| ATOM | 11951 | CG1 | ILE | D | 265 | 14.145 | 100.640 | 79.813 | 1.00 35.05 | C |
| ATOM | 11952 | CG2 | ILE | D | 265 | 12.408 | 101.954 | 81.062 | 1.00 35.07 | C |
| ATOM | 11953 | CD1 | ILE | D | 265 | 14.717 | 101.827 | 79.072 | 1.00 37.30 | C |
| ATOM | 11954 | N | GLU | D | 266 | 12.438 | 99.601 | 83.192 | 1.00 34.79 | N |
| ATOM | 11955 | CA | GLU | D | 266 | 13.124 | 99.394 | 84.462 | 1.00 36.00 | C |
| ATOM | 11956 | C | GLU | D | 266 | 13.398 | 97.903 | 84.718 | 1.00 34.07 | C |
| ATOM | 11957 | O | GLU | D | 266 | 14.521 | 97.517 | 85.047 | 1.00 33.44 | O |
| ATOM | 11958 | CB | GLU | D | 266 | 12.303 | 100.026 | 85.599 | 1.00 38.82 | C |
| ATOM | 11959 | CG | GLU | D | 266 | 12.947 | 99.950 | 86.979 | 1.00 46.10 | C |

| ATOM | 11960 | CD | GLU | D | 266 | 12.390 | 100.986 | 87.965 | 1.00 | 50.76 | C |
|------|-------|-----|-----|---|-----|--------|---------|--------|------|-------|---|
| ATOM | 11961 | OE1 | GLU | D | 266 | 11.152 | 101.198 | 87.999 | 1.00 | 51.39 | O |
| ATOM | 11962 | OE2 | GLU | D | 266 | 13.197 | 101.580 | 88.718 | 1.00 | 52.49 | O |
| ATOM | 11963 | N | PRO | D | 267 | 12.378 | 97.044 | 84.576 | 1.00 | 32.05 | N |
| ATOM | 11964 | CA | PRO | D | 267 | 12.631 | 95.615 | 84.807 | 1.00 | 30.70 | C |
| ATOM | 11965 | C | PRO | D | 267 | 13.613 | 95.066 | 83.760 | 1.00 | 29.54 | C |
| ATOM | 11966 | O | PRO | D | 267 | 14.425 | 94.181 | 84.048 | 1.00 | 28.49 | O |
| ATOM | 11967 | CB | PRO | D | 267 | 11.243 | 94.994 | 84.675 | 1.00 | 31.47 | C |
| ATOM | 11968 | CG | PRO | D | 267 | 10.326 | 96.107 | 85.107 | 1.00 | 30.99 | C |
| ATOM | 11969 | CD | PRO | D | 267 | 10.937 | 97.307 | 84.432 | 1.00 | 31.46 | C |
| ATOM | 11970 | N | CYS | D | 268 | 13.533 | 95.603 | 82.544 | 1.00 | 28.27 | N |
| ATOM | 11971 | CA | CYS | D | 268 | 14.407 | 95.173 | 81.458 | 1.00 | 27.71 | C |
| ATOM | 11972 | C | CYS | D | 268 | 15.860 | 95.483 | 81.773 | 1.00 | 28.07 | C |
| ATOM | 11973 | O | CYS | D | 268 | 16.738 | 94.650 | 81.561 | 1.00 | 28.80 | O |
| ATOM | 11974 | CB | CYS | D | 268 | 14.017 | 95.856 | 80.146 | 1.00 | 26.62 | C |
| ATOM | 11975 | SG | CYS | D | 268 | 12.448 | 95.306 | 79.431 | 1.00 | 32.18 | S |
| ATOM | 11976 | N | ILE | D | 269 | 16.115 | 96.683 | 82.282 | 1.00 | 28.19 | N |
| ATOM | 11977 | CA | ILE | D | 269 | 17.473 | 97.083 | 82.626 | 1.00 | 27.48 | C |
| ATOM | 11978 | C | ILE | D | 269 | 18.034 | 96.210 | 83.740 | 1.00 | 26.42 | C |
| ATOM | 11979 | O | ILE | D | 269 | 19.181 | 95.781 | 83.680 | 1.00 | 29.08 | O |
| ATOM | 11980 | CB | ILE | D | 269 | 17.524 | 98.568 | 83.071 | 1.00 | 29.39 | C |
| ATOM | 11981 | CG1 | ILE | D | 269 | 17.207 | 99.476 | 81.879 | 1.00 | 28.52 | C |
| ATOM | 11982 | CG2 | ILE | D | 269 | 18.897 | 98.904 | 83.640 | 1.00 | 27.81 | C |
| ATOM | 11983 | CD1 | ILE | D | 269 | 17.045 | 100.939 | 82.252 | 1.00 | 32.12 | C |
| ATOM | 11984 | N | ALA | D | 270 | 17.226 | 95.945 | 84.757 | 1.00 | 25.58 | N |
| ATOM | 11985 | CA | ALA | D | 270 | 17.669 | 95.124 | 85.877 | 1.00 | 26.02 | C |
| ATOM | 11986 | C | ALA | D | 270 | 17.985 | 93.706 | 85.417 | 1.00 | 26.27 | C |
| ATOM | 11987 | O | ALA | D | 270 | 19.010 | 93.135 | 85.781 | 1.00 | 28.27 | O |
| ATOM | 11988 | CB | ALA | D | 270 | 16.593 | 95.095 | 86.961 | 1.00 | 27.06 | C |
| ATOM | 11989 | N | ARG | D | 271 | 17.103 | 93.135 | 84.609 | 1.00 | 26.94 | N |
| ATOM | 11990 | CA | ARG | D | 271 | 17.316 | 91.781 | 84.123 | 1.00 | 27.77 | C |
| ATOM | 11991 | C | ARG | D | 271 | 18.523 | 91.709 | 83.200 | 1.00 | 28.69 | C |
| ATOM | 11992 | O | ARG | D | 271 | 19.283 | 90.740 | 83.236 | 1.00 | 28.39 | O |
| ATOM | 11993 | CB | ARG | D | 271 | 16.051 | 91.272 | 83.418 | 1.00 | 27.82 | C |
| ATOM | 11994 | CG | ARG | D | 271 | 14.979 | 90.812 | 84.399 | 1.00 | 25.20 | C |
| ATOM | 11995 | CD | ARG | D | 271 | 13.664 | 90.501 | 83.717 | 1.00 | 25.99 | C |
| ATOM | 11996 | NE | ARG | D | 271 | 12.691 | 89.952 | 84.659 | 1.00 | 23.13 | N |
| ATOM | 11997 | CZ | ARG | D | 271 | 12.473 | 88.653 | 84.843 | 1.00 | 24.59 | C |
| ATOM | 11998 | NH1 | ARG | D | 271 | 13.158 | 87.756 | 84.144 | 1.00 | 25.81 | N |
| ATOM | 11999 | NH2 | ARG | D | 271 | 11.564 | 88.249 | 85.721 | 1.00 | 20.36 | N |
| ATOM | 12000 | N | ALA | D | 272 | 18.708 | 92.751 | 82.393 | 1.00 | 28.77 | N |
| ATOM | 12001 | CA | ALA | D | 272 | 19.823 | 92.806 | 81.462 | 1.00 | 28.13 | C |
| ATOM | 12002 | C | ALA | D | 272 | 21.142 | 92.786 | 82.221 | 1.00 | 28.70 | C |
| ATOM | 12003 | O | ALA | D | 272 | 22.076 | 92.083 | 81.835 | 1.00 | 29.36 | O |
| ATOM | 12004 | CB | ALA | D | 272 | 19.729 | 94.063 | 80.596 | 1.00 | 27.61 | C |
| ATOM | 12005 | N | LYS | D | 273 | 21.217 | 93.559 | 83.301 | 1.00 | 27.81 | N |
| ATOM | 12006 | CA | LYS | D | 273 | 22.434 | 93.612 | 84.104 | 1.00 | 28.74 | C |
| ATOM | 12007 | C | LYS | D | 273 | 22.694 | 92.256 | 84.736 | 1.00 | 27.90 | C |
| ATOM | 12008 | O | LYS | D | 273 | 23.842 | 91.844 | 84.892 | 1.00 | 29.94 | O |
| ATOM | 12009 | CB | LYS | D | 273 | 22.312 | 94.670 | 85.208 | 1.00 | 29.76 | C |
| ATOM | 12010 | CG | LYS | D | 273 | 22.266 | 96.106 | 84.700 | 1.00 | 30.81 | C |
| ATOM | 12011 | CD | LYS | D | 273 | 22.007 | 97.076 | 85.842 | 1.00 | 32.62 | C |
| ATOM | 12012 | CE | LYS | D | 273 | 21.870 | 98.503 | 85.345 | 1.00 | 34.81 | C |
| ATOM | 12013 | NZ | LYS | D | 273 | 21.624 | 99.444 | 86.473 | 1.00 | 34.70 | N |
| ATOM | 12014 | N | ALA | D | 274 | 21.623 | 91.563 | 85.103 | 1.00 | 26.88 | N |
| ATOM | 12015 | CA | ALA | D | 274 | 21.751 | 90.250 | 85.719 | 1.00 | 26.20 | C |
| ATOM | 12016 | C | ALA | D | 274 | 22.189 | 89.200 | 84.699 | 1.00 | 26.31 | C |
| ATOM | 12017 | O | ALA | D | 274 | 22.919 | 88.269 | 85.035 | 1.00 | 25.92 | O |
| ATOM | 12018 | CB | ALA | D | 274 | 20.423 | 89.840 | 86.361 | 1.00 | 25.89 | C |
| ATOM | 12019 | N | TYR | D | 275 | 21.752 | 89.355 | 83.451 | 1.00 | 25.87 | N |
| ATOM | 12020 | CA | TYR | D | 275 | 22.105 | 88.396 | 82.407 | 1.00 | 24.89 | C |
| ATOM | 12021 | C | TYR | D | 275 | 23.483 | 88.679 | 81.808 | 1.00 | 24.77 | C |
| ATOM | 12022 | O | TYR | D | 275 | 24.150 | 87.775 | 81.302 | 1.00 | 24.16 | O |
| ATOM | 12023 | CB | TYR | D | 275 | 21.070 | 88.423 | 81.268 | 1.00 | 21.62 | C |
| ATOM | 12024 | CG | TYR | D | 275 | 19.626 | 88.198 | 81.675 | 1.00 | 20.04 | C |
| ATOM | 12025 | CD1 | TYR | D | 275 | 19.298 | 87.442 | 82.805 | 1.00 | 19.43 | C |
| ATOM | 12026 | CD2 | TYR | D | 275 | 18.584 | 88.713 | 80.902 | 1.00 | 18.08 | C |
| ATOM | 12027 | CE1 | TYR | D | 275 | 17.975 | 87.212 | 83.155 | 1.00 | 17.39 | C |
| ATOM | 12028 | CE2 | TYR | D | 275 | 17.255 | 88.481 | 81.238 | 1.00 | 17.44 | C |
| ATOM | 12029 | CZ | TYR | D | 275 | 16.956 | 87.734 | 82.366 | 1.00 | 18.18 | C |
| ATOM | 12030 | OH | TYR | D | 275 | 15.644 | 87.535 | 82.715 | 1.00 | 13.45 | O |
| ATOM | 12031 | N | ALA | D | 276 | 23.902 | 89.937 | 81.877 | 1.00 | 24.61 | N |
| ATOM | 12032 | CA | ALA | D | 276 | 25.169 | 90.372 | 81.303 | 1.00 | 24.80 | C |
| ATOM | 12033 | C | ALA | D | 276 | 26.336 | 89.389 | 81.354 | 1.00 | 25.64 | C |
| ATOM | 12034 | O | ALA | D | 276 | 26.926 | 89.068 | 80.319 | 1.00 | 26.39 | O |
| ATOM | 12035 | CB | ALA | D | 276 | 25.582 | 91.693 | 81.926 | 1.00 | 25.78 | C |
| ATOM | 12036 | N | PRO | D | 277 | 26.683 | 88.891 | 82.554 | 1.00 | 25.99 | N |
| ATOM | 12037 | CA | PRO | D | 277 | 27.799 | 87.946 | 82.704 | 1.00 | 26.85 | C |
| ATOM | 12038 | C | PRO | D | 277 | 27.606 | 86.630 | 81.953 | 1.00 | 26.54 | C |
| ATOM | 12039 | O | PRO | D | 277 | 28.567 | 85.894 | 81.715 | 1.00 | 25.79 | O |

| | | | | | | X | Y | Z | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ATOM | 12040 | CB | PRO | D | 277 | 27.865 | 87.710 | 84.219 | 1.00 | 26.23 | C |
| ATOM | 12041 | CG | PRO | D | 277 | 27.105 | 88.879 | 84.815 | 1.00 | 25.75 | C |
| ATOM | 12042 | CD | PRO | D | 277 | 25.992 | 89.087 | 83.839 | 1.00 | 25.29 | C |
| ATOM | 12043 | N | PHE | D | 278 | 26.362 | 86.345 | 81.581 | 1.00 | 25.13 | N |
| ATOM | 12044 | CA | PHE | D | 278 | 26.035 | 85.101 | 80.894 | 1.00 | 24.21 | C |
| ATOM | 12045 | C | PHE | D | 278 | 25.581 | 85.298 | 79.452 | 1.00 | 24.05 | C |
| ATOM | 12046 | O | PHE | D | 278 | 25.080 | 84.362 | 78.833 | 1.00 | 21.81 | O |
| ATOM | 12047 | CB | PHE | D | 278 | 24.923 | 84.389 | 81.662 | 1.00 | 23.81 | C |
| ATOM | 12048 | CG | PHE | D | 278 | 25.225 | 84.183 | 83.116 | 1.00 | 25.40 | C |
| ATOM | 12049 | CD1 | PHE | D | 278 | 26.041 | 83.137 | 83.532 | 1.00 | 27.22 | C |
| ATOM | 12050 | CD2 | PHE | D | 278 | 24.692 | 85.036 | 84.076 | 1.00 | 27.66 | C |
| ATOM | 12051 | CE1 | PHE | D | 278 | 26.323 | 82.941 | 84.891 | 1.00 | 26.81 | C |
| ATOM | 12052 | CE2 | PHE | D | 278 | 24.968 | 84.850 | 85.435 | 1.00 | 27.96 | C |
| ATOM | 12053 | CZ | PHE | D | 278 | 25.785 | 83.797 | 85.840 | 1.00 | 26.82 | C |
| ATOM | 12054 | N | ALA | D | 279 | 25.750 | 86.501 | 78.912 | 1.00 | 25.09 | N |
| ATOM | 12055 | CA | ALA | D | 279 | 25.299 | 86.761 | 77.548 | 1.00 | 26.00 | C |
| ATOM | 12056 | C | ALA | D | 279 | 26.276 | 87.548 | 76.687 | 1.00 | 26.44 | C |
| ATOM | 12057 | O | ALA | D | 279 | 26.777 | 88.594 | 77.100 | 1.00 | 26.64 | O |
| ATOM | 12058 | CB | ALA | D | 279 | 23.951 | 87.479 | 77.583 | 1.00 | 24.86 | C |
| ATOM | 12059 | N | ASP | D | 280 | 26.528 | 87.039 | 75.482 | 1.00 | 27.69 | N |
| ATOM | 12060 | CA | ASP | D | 280 | 27.426 | 87.698 | 74.540 | 1.00 | 27.80 | C |
| ATOM | 12061 | C | ASP | D | 280 | 26.725 | 88.919 | 73.954 | 1.00 | 26.69 | C |
| ATOM | 12062 | O | ASP | D | 280 | 27.374 | 89.858 | 73.491 | 1.00 | 26.31 | O |
| ATOM | 12063 | CB | ASP | D | 280 | 27.824 | 86.747 | 73.412 | 1.00 | 27.70 | C |
| ATOM | 12064 | CG | ASP | D | 280 | 28.563 | 85.529 | 73.911 | 1.00 | 29.78 | C |
| ATOM | 12065 | OD1 | ASP | D | 280 | 29.457 | 85.687 | 74.772 | 1.00 | 30.90 | O |
| ATOM | 12066 | OD2 | ASP | D | 280 | 28.263 | 84.413 | 73.432 | 1.00 | 30.54 | O |
| ATOM | 12067 | N | LEU | D | 281 | 25.394 | 88.886 | 73.972 | 1.00 | 26.26 | N |
| ATOM | 12068 | CA | LEU | D | 281 | 24.574 | 89.985 | 73.472 | 1.00 | 25.70 | C |
| ATOM | 12069 | C | LEU | D | 281 | 23.277 | 90.004 | 74.256 | 1.00 | 26.19 | C |
| ATOM | 12070 | O | LEU | D | 281 | 22.755 | 88.954 | 74.639 | 1.00 | 27.17 | O |
| ATOM | 12071 | CB | LEU | D | 281 | 24.263 | 89.815 | 71.981 | 1.00 | 26.23 | C |
| ATOM | 12072 | CG | LEU | D | 281 | 25.409 | 89.937 | 70.975 | 1.00 | 26.49 | C |
| ATOM | 12073 | CD1 | LEU | D | 281 | 25.480 | 88.687 | 70.139 | 1.00 | 26.67 | C |
| ATOM | 12074 | CD2 | LEU | D | 281 | 25.198 | 91.145 | 70.089 | 1.00 | 27.43 | C |
| ATOM | 12075 | N | ILE | D | 282 | 22.762 | 91.201 | 74.507 | 1.00 | 25.07 | N |
| ATOM | 12076 | CA | ILE | D | 282 | 21.524 | 91.341 | 75.242 | 1.00 | 24.32 | C |
| ATOM | 12077 | C | ILE | D | 282 | 20.502 | 92.053 | 74.373 | 1.00 | 24.72 | C |
| ATOM | 12078 | O | ILE | D | 282 | 20.819 | 92.996 | 73.654 | 1.00 | 24.08 | O |
| ATOM | 12079 | CB | ILE | D | 282 | 21.754 | 92.106 | 76.559 | 1.00 | 26.39 | C |
| ATOM | 12080 | CG1 | ILE | D | 282 | 22.748 | 91.319 | 77.420 | 1.00 | 25.79 | C |
| ATOM | 12081 | CG2 | ILE | D | 282 | 20.432 | 92.291 | 77.300 | 1.00 | 25.32 | C |
| ATOM | 12082 | CD1 | ILE | D | 282 | 23.076 | 91.954 | 78.745 | 1.00 | 28.98 | C |
| ATOM | 12083 | N | TRP | D | 283 | 19.269 | 91.577 | 74.436 | 1.00 | 26.47 | N |
| ATOM | 12084 | CA | TRP | D | 283 | 18.196 | 92.131 | 73.634 | 1.00 | 26.14 | C |
| ATOM | 12085 | C | TRP | D | 283 | 16.926 | 92.289 | 74.454 | 1.00 | 26.50 | C |
| ATOM | 12086 | O | TRP | D | 283 | 16.514 | 91.371 | 75.165 | 1.00 | 27.07 | O |
| ATOM | 12087 | CB | TRP | D | 283 | 17.977 | 91.205 | 72.424 | 1.00 | 25.19 | C |
| ATOM | 12088 | CG | TRP | D | 283 | 16.607 | 91.197 | 71.778 | 1.00 | 26.34 | C |
| ATOM | 12089 | CD1 | TRP | D | 283 | 15.703 | 92.227 | 71.719 | 1.00 | 25.67 | C |
| ATOM | 12090 | CD2 | TRP | D | 283 | 16.038 | 90.124 | 71.011 | 1.00 | 24.84 | C |
| ATOM | 12091 | NE1 | TRP | D | 283 | 14.614 | 91.859 | 70.961 | 1.00 | 25.33 | N |
| ATOM | 12092 | CE2 | TRP | D | 283 | 14.795 | 90.575 | 70.514 | 1.00 | 25.49 | C |
| ATOM | 12093 | CE3 | TRP | D | 283 | 16.464 | 88.825 | 70.692 | 1.00 | 24.98 | C |
| ATOM | 12094 | CZ2 | TRP | D | 283 | 13.970 | 89.771 | 69.710 | 1.00 | 26.52 | C |
| ATOM | 12095 | CZ3 | TRP | D | 283 | 15.644 | 88.025 | 69.894 | 1.00 | 24.14 | C |
| ATOM | 12096 | CH2 | TRP | D | 283 | 14.411 | 88.505 | 69.413 | 1.00 | 26.20 | C |
| ATOM | 12097 | N | MET | D | 284 | 16.324 | 93.469 | 74.371 | 1.00 | 26.59 | N |
| ATOM | 12098 | CA | MET | D | 284 | 15.079 | 93.729 | 75.075 | 1.00 | 27.95 | C |
| ATOM | 12099 | C | MET | D | 284 | 14.033 | 94.005 | 74.010 | 1.00 | 27.34 | C |
| ATOM | 12100 | O | MET | D | 284 | 14.278 | 94.771 | 73.079 | 1.00 | 30.48 | O |
| ATOM | 12101 | CB | MET | D | 284 | 15.205 | 94.943 | 76.011 | 1.00 | 28.73 | C |
| ATOM | 12102 | CG | MET | D | 284 | 14.577 | 96.223 | 75.478 | 1.00 | 31.21 | C |
| ATOM | 12103 | SD | MET | D | 284 | 14.529 | 97.605 | 76.646 | 1.00 | 34.35 | S |
| ATOM | 12104 | CE | MET | D | 284 | 12.784 | 97.742 | 76.935 | 1.00 | 30.72 | C |
| ATOM | 12105 | N | GLU | D | 285 | 12.883 | 93.357 | 74.127 | 1.00 | 27.03 | N |
| ATOM | 12106 | CA | GLU | D | 285 | 11.793 | 93.560 | 73.185 | 1.00 | 28.87 | C |
| ATOM | 12107 | C | GLU | D | 285 | 11.130 | 94.884 | 73.520 | 1.00 | 29.57 | C |
| ATOM | 12108 | O | GLU | D | 285 | 11.032 | 95.251 | 74.689 | 1.00 | 29.53 | O |
| ATOM | 12109 | CB | GLU | D | 285 | 10.762 | 92.438 | 73.312 | 1.00 | 28.80 | C |
| ATOM | 12110 | CG | GLU | D | 285 | 11.116 | 91.171 | 72.568 | 1.00 | 29.00 | C |
| ATOM | 12111 | CD | GLU | D | 285 | 10.943 | 91.330 | 71.073 | 1.00 | 29.33 | C |
| ATOM | 12112 | OE1 | GLU | D | 285 | 11.835 | 91.914 | 70.422 | 1.00 | 27.57 | O |
| ATOM | 12113 | OE2 | GLU | D | 285 | 9.899 | 90.880 | 70.557 | 1.00 | 29.67 | O |
| ATOM | 12114 | N | THR | D | 286 | 10.676 | 95.598 | 72.497 | 1.00 | 31.86 | N |
| ATOM | 12115 | CA | THR | D | 286 | 10.011 | 96.883 | 72.701 | 1.00 | 33.11 | C |
| ATOM | 12116 | C | THR | D | 286 | 8.673 | 96.903 | 71.964 | 1.00 | 33.68 | C |
| ATOM | 12117 | O | THR | D | 286 | 8.486 | 96.181 | 70.984 | 1.00 | 32.61 | O |
| ATOM | 12118 | CB | THR | D | 286 | 10.886 | 98.057 | 72.195 | 1.00 | 33.26 | C |
| ATOM | 12119 | OG1 | THR | D | 286 | 11.162 | 97.889 | 70.801 | 1.00 | 33.06 | O |

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ATOM  12120  CG2 THR D 286     12.205  98.102  72.946  1.00 34.66           C
ATOM  12121  N   GLY D 287      7.746  97.729  72.445  1.00 34.12           N
ATOM  12122  CA  GLY D 287      6.438  97.827  71.818  1.00 34.89           C
ATOM  12123  C   GLY D 287      6.390  98.741  70.599  1.00 35.41           C
ATOM  12124  O   GLY D 287      5.415  98.723  69.841  1.00 36.73           O
ATOM  12125  N   THR D 288      7.435  99.543  70.409  1.00 34.24           N
ATOM  12126  CA  THR D 288      7.515 100.464  69.272  1.00 33.72           C
ATOM  12127  C   THR D 288      8.980 100.730  68.920  1.00 32.71           C
ATOM  12128  O   THR D 288      9.869 100.563  69.758  1.00 32.77           O
ATOM  12129  CB  THR D 288      6.877 101.833  69.594  1.00 33.51           C
ATOM  12130  OG1 THR D 288      7.696 102.516  70.549  1.00 35.22           O
ATOM  12131  CG2 THR D 288      5.473 101.668  70.166  1.00 32.96           C
ATOM  12132  N   PRO D 289      9.252 101.134  67.668  1.00 32.36           N
ATOM  12133  CA  PRO D 289     10.628 101.422  67.249  1.00 33.28           C
ATOM  12134  C   PRO D 289     10.975 102.829  67.757  1.00 34.56           C
ATOM  12135  O   PRO D 289     10.606 103.832  67.142  1.00 33.74           O
ATOM  12136  CB  PRO D 289     10.537 101.339  65.729  1.00 32.16           C
ATOM  12137  CG  PRO D 289      9.163 101.883  65.462  1.00 30.71           C
ATOM  12138  CD  PRO D 289      8.322 101.219  66.526  1.00 31.72           C
ATOM  12139  N   ASP D 290     11.684 102.891  68.883  1.00 35.40           N
ATOM  12140  CA  ASP D 290     12.036 104.163  69.515  1.00 35.99           C
ATOM  12141  C   ASP D 290     13.532 104.298  69.813  1.00 35.53           C
ATOM  12142  O   ASP D 290     14.069 103.593  70.674  1.00 35.62           O
ATOM  12143  CB  ASP D 290     11.241 104.289  70.816  1.00 37.83           C
ATOM  12144  CG  ASP D 290     11.264 105.687  71.385  1.00 40.12           C
ATOM  12145  OD1 ASP D 290     12.361 106.188  71.723  1.00 41.80           O
ATOM  12146  OD2 ASP D 290     10.172 106.281  71.496  1.00 40.19           O
ATOM  12147  N   LEU D 291     14.200 105.216  69.121  1.00 33.99           N
ATOM  12148  CA  LEU D 291     15.633 105.409  69.321  1.00 34.25           C
ATOM  12149  C   LEU D 291     16.001 105.921  70.706  1.00 34.37           C
ATOM  12150  O   LEU D 291     17.090 105.633  71.213  1.00 34.13           O
ATOM  12151  CB  LEU D 291     16.198 106.366  68.266  1.00 33.47           C
ATOM  12152  CG  LEU D 291     16.353 105.782  66.863  1.00 34.10           C
ATOM  12153  CD1 LEU D 291     16.862 106.853  65.913  1.00 32.22           C
ATOM  12154  CD2 LEU D 291     17.315 104.599  66.914  1.00 31.37           C
ATOM  12155  N   GLU D 292     15.097 106.682  71.313  1.00 34.44           N
ATOM  12156  CA  GLU D 292     15.350 107.236  72.635  1.00 35.96           C
ATOM  12157  C   GLU D 292     15.227 106.149  73.698  1.00 35.21           C
ATOM  12158  O   GLU D 292     16.015 106.097  74.646  1.00 35.23           O
ATOM  12159  CB  GLU D 292     14.373 108.379  72.925  1.00 37.90           C
ATOM  12160  CG  GLU D 292     15.050 109.636  73.447  1.00 40.75           C
ATOM  12161  CD  GLU D 292     15.806 109.397  74.741  1.00 42.02           C
ATOM  12162  OE1 GLU D 292     15.157 109.094  75.765  1.00 41.91           O
ATOM  12163  OE2 GLU D 292     17.052 109.508  74.731  1.00 42.84           O
ATOM  12164  N   ALA D 293     14.232 105.283  73.540  1.00 34.50           N
ATOM  12165  CA  ALA D 293     14.039 104.186  74.479  1.00 33.58           C
ATOM  12166  C   ALA D 293     15.267 103.284  74.378  1.00 33.77           C
ATOM  12167  O   ALA D 293     15.799 102.815  75.387  1.00 35.49           O
ATOM  12168  CB  ALA D 293     12.781 103.412  74.124  1.00 33.15           C
ATOM  12169  N   ALA D 294     15.726 103.060  73.151  1.00 33.22           N
ATOM  12170  CA  ALA D 294     16.898 102.227  72.916  1.00 34.34           C
ATOM  12171  C   ALA D 294     18.128 102.834  73.588  1.00 35.61           C
ATOM  12172  O   ALA D 294     18.966 102.118  74.141  1.00 35.35           O
ATOM  12173  CB  ALA D 294     17.143 102.077  71.423  1.00 33.76           C
ATOM  12174  N   ARG D 295     18.239 104.157  73.528  1.00 36.81           N
ATOM  12175  CA  ARG D 295     19.365 104.851  74.143  1.00 37.21           C
ATOM  12176  C   ARG D 295     19.286 104.667  75.654  1.00 36.35           C
ATOM  12177  O   ARG D 295     20.280 104.381  76.320  1.00 35.31           O
ATOM  12178  CB  ARG D 295     19.307 106.344  73.820  1.00 39.31           C
ATOM  12179  CG  ARG D 295     20.416 107.150  74.473  1.00 42.41           C
ATOM  12180  CD  ARG D 295     19.974 108.582  74.736  1.00 45.89           C
ATOM  12181  NE  ARG D 295     19.497 109.238  73.520  1.00 50.46           N
ATOM  12182  CZ  ARG D 295     20.243 109.455  72.437  1.00 52.67           C
ATOM  12183  NH1 ARG D 295     21.517 109.072  72.406  1.00 52.60           N
ATOM  12184  NH2 ARG D 295     19.711 110.056  71.379  1.00 53.30           N
ATOM  12185  N   GLN D 296     18.084 104.842  76.185  1.00 36.88           N
ATOM  12186  CA  GLN D 296     17.844 104.708  77.610  1.00 37.66           C
ATOM  12187  C   GLN D 296     18.315 103.343  78.101  1.00 37.32           C
ATOM  12188  O   GLN D 296     19.068 103.244  79.072  1.00 38.23           O
ATOM  12189  CB  GLN D 296     16.354 104.884  77.890  1.00 39.16           C
ATOM  12190  CG  GLN D 296     16.037 105.219  79.327  1.00 42.43           C
ATOM  12191  CD  GLN D 296     14.589 105.613  79.508  1.00 44.86           C
ATOM  12192  OE1 GLN D 296     14.032 106.357  78.696  1.00 45.78           O
ATOM  12193  NE2 GLN D 296     13.972 105.131  80.583  1.00 45.40           N
ATOM  12194  N   PHE D 297     17.870 102.294  77.416  1.00 35.74           N
ATOM  12195  CA  PHE D 297     18.242 100.932  77.767  1.00 32.61           C
ATOM  12196  C   PHE D 297     19.740 100.706  77.618  1.00 31.82           C
ATOM  12197  O   PHE D 297     20.388 100.183  78.522  1.00 31.13           O
ATOM  12198  CB  PHE D 297     17.492  99.943  76.874  1.00 33.51           C
ATOM  12199  CG  PHE D 297     17.912  98.510  77.064  1.00 32.97           C
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ATOM   12200  CD1 PHE D 297      17.622  97.835  78.249  1.00 32.89           C
ATOM   12201  CD2 PHE D 297      18.601  97.838  76.058  1.00 31.54           C
ATOM   12202  CE1 PHE D 297      18.011  96.506  78.432  1.00 33.71           C
ATOM   12203  CE2 PHE D 297      18.995  96.508  76.228  1.00 32.87           C
ATOM   12204  CZ  PHE D 297      18.699  95.840  77.421  1.00 33.19           C
ATOM   12205  N   SER D 298      20.284 101.107  76.473  1.00 31.97           N
ATOM   12206  CA  SER D 298      21.705 100.922  76.186  1.00 33.28           C
ATOM   12207  C   SER D 298      22.635 101.588  77.190  1.00 34.90           C
ATOM   12208  O   SER D 298      23.565 100.958  77.702  1.00 36.50           O
ATOM   12209  CB  SER D 298      22.035 101.438  74.783  1.00 33.45           C
ATOM   12210  OG  SER D 298      23.417 101.279  74.507  1.00 34.97           O
ATOM   12211  N   GLU D 299      22.389 102.863  77.467  1.00 35.26           N
ATOM   12212  CA  GLU D 299      23.221 103.600  78.405  1.00 36.94           C
ATOM   12213  C   GLU D 299      23.169 102.988  79.811  1.00 36.16           C
ATOM   12214  O   GLU D 299      24.208 102.785  80.450  1.00 35.85           O
ATOM   12215  CB  GLU D 299      22.792 105.077  78.423  1.00 38.15           C
ATOM   12216  CG  GLU D 299      22.926 105.761  77.046  1.00 40.99           C
ATOM   12217  CD  GLU D 299      22.721 107.257  77.080  1.00 43.50           C
ATOM   12218  OE1 GLU D 299      21.584 107.730  77.352  1.00 44.19           O
ATOM   12219  OE2 GLU D 299      23.703 108.015  76.830  1.00 42.71           O
ATOM   12220  N   ALA D 300      21.964 102.676  80.277  1.00 34.53           N
ATOM   12221  CA  ALA D 300      21.789 102.093  81.603  1.00 35.04           C
ATOM   12222  C   ALA D 300      22.585 100.809  81.763  1.00 35.83           C
ATOM   12223  O   ALA D 300      23.185 100.575  82.810  1.00 36.79           O
ATOM   12224  CB  ALA D 300      20.312 101.821  81.866  1.00 34.88           C
ATOM   12225  N   VAL D 301      22.582  99.976  80.724  1.00 36.26           N
ATOM   12226  CA  VAL D 301      23.298  98.706  80.748  1.00 35.95           C
ATOM   12227  C   VAL D 301      24.803  98.884  80.606  1.00 37.30           C
ATOM   12228  O   VAL D 301      25.581  98.298  81.360  1.00 38.11           O
ATOM   12229  CB  VAL D 301      22.814  97.769  79.618  1.00 35.49           C
ATOM   12230  CG1 VAL D 301      23.681  96.522  79.570  1.00 32.84           C
ATOM   12231  CG2 VAL D 301      21.359  97.398  79.841  1.00 35.39           C
ATOM   12232  N   LYS D 302      25.220  99.677  79.628  1.00 38.03           N
ATOM   12233  CA  LYS D 302      26.642  99.897  79.425  1.00 40.12           C
ATOM   12234  C   LYS D 302      27.252 100.661  80.589  1.00 40.70           C
ATOM   12235  O   LYS D 302      28.475 100.757  80.705  1.00 41.24           O
ATOM   12236  CB  LYS D 302      26.883 100.638  78.112  1.00 40.64           C
ATOM   12237  CG  LYS D 302      26.655  99.765  76.883  1.00 41.76           C
ATOM   12238  CD  LYS D 302      26.956 100.522  75.599  1.00 42.37           C
ATOM   12239  CE  LYS D 302      26.901  99.600  74.392  1.00 43.09           C
ATOM   12240  NZ  LYS D 302      27.912  98.510  74.493  1.00 41.92           N
ATOM   12241  N   ALA D 303      26.394 101.199  81.451  1.00 41.42           N
ATOM   12242  CA  ALA D 303      26.856 101.933  82.623  1.00 42.23          .C
ATOM   12243  C   ALA D 303      27.608 100.978  83.549  1.00 42.84           C
ATOM   12244  O   ALA D 303      28.557 101.376  84.229  1.00 43.28           O
ATOM   12245  CB  ALA D 303      25.677 102.548  83.354  1.00 41.70           C
ATOM   12246  N   GLU D 304      27.180  99.718  83.571  1.00 41.68           N
ATOM   12247  CA  GLU D 304      27.825  98.709  84.405  1.00 40.93           C
ATOM   12248  C   GLU D 304      28.639  97.703  83.598  1.00 39.86           C
ATOM   12249  O   GLU D 304      29.513  97.024  84.138  1.00 39.36           O
ATOM   12250  CB  GLU D 304      26.783  97.977  85.245  1.00 41.42           C
ATOM   12251  CG  GLU D 304      26.379  98.745  86.481  1.00 44.99           C
ATOM   12252  CD  GLU D 304      25.367  98.004  87.316  1.00 47.34           C
ATOM   12253  OE1 GLU D 304      25.601  96.816  87.623  1.00 48.32           O
ATOM   12254  OE2 GLU D 304      24.338  98.614  87.670  1.00 50.22           O
ATOM   12255  N   TYR D 305      28.349  97.614  82.303  1.00 38.80           N
ATOM   12256  CA  TYR D 305      29.049  96.697  81.409  1.00 37.68           C
ATOM   12257  C   TYR D 305      29.330  97.424  80.098  1.00 38.17           C
ATOM   12258  O   TYR D 305      28.590  97.281  79.125  1.00 38.41           O
ATOM   12259  CB  TYR D 305      28.189  95.457  81.162  1.00 35.69           C
ATOM   12260  CG  TYR D 305      27.938  94.653  82.416  1.00 34.45           C
ATOM   12261  CD1 TYR D 305      28.898  93.769  82.901  1.00 34.24           C
ATOM   12262  CD2 TYR D 305      26.758  94.811  83.146  1.00 33.49           C
ATOM   12263  CE1 TYR D 305      28.693  93.062  84.083  1.00 35.23           C
ATOM   12264  CE2 TYR D 305      26.544  94.114  84.326  1.00 33.73           C
ATOM   12265  CZ  TYR D 305      27.515  93.240  84.792  1.00 36.41           C
ATOM   12266  OH  TYR D 305      27.318  92.549  85.970  1.00 38.53           O
ATOM   12267  N   PRO D 306      30.410  98.224  80.066  1.00 38.57           N
ATOM   12268  CA  PRO D 306      30.855  99.016  78.912  1.00 37.29           C
ATOM   12269  C   PRO D 306      31.027  98.226  77.616  1.00 36.98           C
ATOM   12270  O   PRO D 306      30.706  98.723  76.533  1.00 36.58           O
ATOM   12271  CB  PRO D 306      32.177  99.612  79.394  1.00 37.93           C
ATOM   12272  CG  PRO D 306      31.970  99.744  80.872  1.00 38.31           C
ATOM   12273  CD  PRO D 306      31.319  98.425  81.210  1.00 38.27           C
ATOM   12274  N   ASP D 307      31.532  97.001  77.729  1.00 35.98           N
ATOM   12275  CA  ASP D 307      31.762  96.159  76.559  1.00 35.74           C
ATOM   12276  C   ASP D 307      30.587  95.272  76.148  1.00 35.20           C
ATOM   12277  O   ASP D 307      30.698  94.499  75.193  1.00 36.17           O
ATOM   12278  CB  ASP D 307      32.985  95.268  76.785  1.00 37.87           C
ATOM   12279  CG  ASP D 307      34.252  96.063  77.040  1.00 40.11           C
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| ATOM | 12280 | OD1 | ASP | D | 307 | 34.487 | 97.054 | 76.321 | 1.00 | 40.34 | O |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 12281 | OD2 | ASP | D | 307 | 35.021 | 95.685 | 77.949 | 1.00 | 40.40 | O |
| ATOM | 12282 | N   | GLN | D | 308 | 29.467 | 95.379 | 76.856 | 1.00 | 34.36 | N |
| ATOM | 12283 | CA  | GLN | D | 308 | 28.299 | 94.560 | 76.548 | 1.00 | 33.44 | C |
| ATOM | 12284 | C   | GLN | D | 308 | 27.611 | 94.973 | 75.251 | 1.00 | 33.29 | C |
| ATOM | 12285 | O   | GLN | D | 308 | 27.036 | 96.057 | 75.160 | 1.00 | 34.60 | O |
| ATOM | 12286 | CB  | GLN | D | 308 | 27.293 | 94.619 | 77.699 | 1.00 | 31.21 | C |
| ATOM | 12287 | CG  | GLN | D | 308 | 26.092 | 93.694 | 77.522 | 1.00 | 30.09 | C |
| ATOM | 12288 | CD  | GLN | D | 308 | 26.491 | 92.235 | 77.344 | 1.00 | 28.82 | C |
| ATOM | 12289 | OE1 | GLN | D | 308 | 26.328 | 91.662 | 76.259 | 1.00 | 28.62 | O |
| ATOM | 12290 | NE2 | GLN | D | 308 | 27.016 | 91.627 | 78.407 | 1.00 | 24.64 | N |
| ATOM | 12291 | N   | MET | D | 309 | 27.674 | 94.104 | 74.247 | 1.00 | 32.90 | N |
| ATOM | 12292 | CA  | MET | D | 309 | 27.039 | 94.385 | 72.968 | 1.00 | 32.55 | C |
| ATOM | 12293 | C   | MET | D | 309 | 25.547 | 94.094 | 73.079 | 1.00 | 31.87 | C |
| ATOM | 12294 | O   | MET | D | 309 | 25.123 | 93.301 | 73.917 | 1.00 | 31.80 | O |
| ATOM | 12295 | CB  | MET | D | 309 | 27.656 | 93.528 | 71.868 | 1.00 | 35.12 | C |
| ATOM | 12296 | CG  | MET | D | 309 | 29.146 | 93.741 | 71.680 | 1.00 | 37.94 | C |
| ATOM | 12297 | SD  | MET | D | 309 | 29.731 | 92.998 | 70.151 | 1.00 | 43.92 | S |
| ATOM | 12298 | CE  | MET | D | 309 | 30.122 | 91.341 | 70.705 | 1.00 | 41.09 | C |
| ATOM | 12299 | N   | LEU | D | 310 | 24.756 | 94.734 | 72.229 | 1.00 | 30.24 | N |
| ATOM | 12300 | CA  | LEU | D | 310 | 23.313 | 94.552 | 72.262 | 1.00 | 30.11 | C |
| ATOM | 12301 | C   | LEU | D | 310 | 22.766 | 94.143 | 70.897 | 1.00 | 28.23 | C |
| ATOM | 12302 | O   | LEU | D | 310 | 23.453 | 94.262 | 69.886 | 1.00 | 28.17 | O |
| ATOM | 12303 | CB  | LEU | D | 310 | 22.649 | 95.854 | 72.713 | 1.00 | 30.23 | C |
| ATOM | 12304 | CG  | LEU | D | 310 | 23.308 | 96.537 | 73.916 | 1.00 | 30.76 | C |
| ATOM | 12305 | CD1 | LEU | D | 310 | 22.667 | 97.894 | 74.156 | 1.00 | 28.59 | C |
| ATOM | 12306 | CD2 | LEU | D | 310 | 23.177 | 95.653 | 75.141 | 1.00 | 30.91 | C |
| ATOM | 12307 | N   | ALA | D | 311 | 21.526 | 93.662 | 70.880 | 1.00 | 27.91 | N |
| ATOM | 12308 | CA  | ALA | D | 311 | 20.872 | 93.243 | 69.642 | 1.00 | 26.73 | C |
| ATOM | 12309 | C   | ALA | D | 311 | 19.520 | 93.918 | 69.591 | 1.00 | 25.98 | C |
| ATOM | 12310 | O   | ALA | D | 311 | 18.882 | 94.101 | 70.629 | 1.00 | 26.57 | O |
| ATOM | 12311 | CB  | ALA | D | 311 | 20.705 | 91.730 | 69.617 | 1.00 | 27.51 | C |
| ATOM | 12312 | N   | TYR | D | 312 | 19.079 | 94.295 | 68.393 | 1.00 | 26.06 | N |
| ATOM | 12313 | CA  | TYR | D | 312 | 17.796 | 94.975 | 68.258 | 1.00 | 25.48 | C |
| ATOM | 12314 | C   | TYR | D | 312 | 16.893 | 94.391 | 67.179 | 1.00 | 25.71 | C |
| ATOM | 12315 | O   | TYR | D | 312 | 17.333 | 94.097 | 66.069 | 1.00 | 27.83 | O |
| ATOM | 12316 | CB  | TYR | D | 312 | 18.024 | 96.469 | 68.000 | 1.00 | 24.34 | C |
| ATOM | 12317 | CG  | TYR | D | 312 | 16.784 | 97.308 | 68.197 | 1.00 | 23.64 | C |
| ATOM | 12318 | CD1 | TYR | D | 312 | 15.763 | 97.313 | 67.248 | 1.00 | 23.21 | C |
| ATOM | 12319 | CD2 | TYR | D | 312 | 16.609 | 98.061 | 69.359 | 1.00 | 22.19 | C |
| ATOM | 12320 | CE1 | TYR | D | 312 | 14.599 | 98.043 | 67.451 | 1.00 | 21.89 | C |
| ATOM | 12321 | CE2 | TYR | D | 312 | 15.450 | 98.794 | 69.572 | 1.00 | 20.13 | C |
| ATOM | 12322 | CZ  | TYR | D | 312 | 14.448 | 98.779 | 68.614 | 1.00 | 21.23 | C |
| ATOM | 12323 | OH  | TYR | D | 312 | 13.291 | 99.492 | 68.820 | 1.00 | 21.31 | O |
| ATOM | 12324 | N   | ASN | D | 313 | 15.617 | 94.248 | 67.516 | 1.00 | 26.42 | N |
| ATOM | 12325 | CA  | ASN | D | 313 | 14.628 | 93.692 | 66.604 | 1.00 | 27.14 | C |
| ATOM | 12326 | C   | ASN | D | 313 | 13.807 | 94.746 | 65.860 | 1.00 | 27.66 | C |
| ATOM | 12327 | O   | ASN | D | 313 | 12.848 | 95.290 | 66.405 | 1.00 | 27.15 | O |
| ATOM | 12328 | CB  | ASN | D | 313 | 13.685 | 92.751 | 67.379 | 1.00 | 25.65 | C |
| ATOM | 12329 | CG  | ASN | D | 313 | 12.488 | 92.292 | 66.552 | 1.00 | 25.65 | C |
| ATOM | 12330 | OD1 | ASN | D | 313 | 12.527 | 92.290 | 65.321 | 1.00 | 27.97 | O |
| ATOM | 12331 | ND2 | ASN | D | 313 | 11.424 | 91.884 | 67.232 | 1.00 | 26.94 | N |
| ATOM | 12332 | N   | CYS | D | 314 | 14.185 | 95.032 | 64.617 | 1.00 | 28.75 | N |
| ATOM | 12333 | CA  | CYS | D | 314 | 13.441 | 95.992 | 63.799 | 1.00 | 29.14 | C |
| ATOM | 12334 | C   | CYS | D | 314 | 12.220 | 95.195 | 63.323 | 1.00 | 29.78 | C |
| ATOM | 12335 | O   | CYS | D | 314 | 12.126 | 94.796 | 62.162 | 1.00 | 30.47 | O |
| ATOM | 12336 | CB  | CYS | D | 314 | 14.292 | 96.453 | 62.605 | 1.00 | 28.47 | C |
| ATOM | 12337 | SG  | CYS | D | 314 | 15.890 | 97.227 | 63.047 | 1.00 | 30.22 | S |
| ATOM | 12338 | N   | SER | D | 315 | 11.292 | 94.972 | 64.249 | 1.00 | 29.24 | N |
| ATOM | 12339 | CA  | SER | D | 315 | 10.091 | 94.179 | 64.012 | 1.00 | 29.26 | C |
| ATOM | 12340 | C   | SER | D | 315 | 9.009  | 94.681 | 63.069 | 1.00 | 29.19 | C |
| ATOM | 12341 | O   | SER | D | 315 | 8.606  | 95.843 | 63.110 | 1.00 | 28.38 | O |
| ATOM | 12342 | CB  | SER | D | 315 | 9.428  | 93.845 | 65.351 | 1.00 | 28.92 | C |
| ATOM | 12343 | OG  | SER | D | 315 | 8.179  | 93.201 | 65.154 | 1.00 | 29.53 | O |
| ATOM | 12344 | N   | PRO | D | 316 | 8.523  | 93.785 | 62.198 | 1.00 | 28.82 | N |
| ATOM | 12345 | CA  | PRO | D | 316 | 7.467  | 94.100 | 61.234 | 1.00 | 28.22 | C |
| ATOM | 12346 | C   | PRO | D | 316 | 6.151  | 94.198 | 61.999 | 1.00 | 29.29 | C |
| ATOM | 12347 | O   | PRO | D | 316 | 5.114  | 94.543 | 61.435 | 1.00 | 31.24 | O |
| ATOM | 12348 | CB  | PRO | D | 316 | 7.497  | 92.905 | 60.284 | 1.00 | 28.15 | C |
| ATOM | 12349 | CG  | PRO | D | 316 | 8.946  | 92.485 | 60.323 | 1.00 | 28.31 | C |
| ATOM | 12350 | CD  | PRO | D | 316 | 9.235  | 92.555 | 61.805 | 1.00 | 27.95 | C |
| ATOM | 12351 | N   | SER | D | 317 | 6.195  | 93.870 | 63.288 | 1.00 | 30.30 | N |
| ATOM | 12352 | CA  | SER | D | 317 | 5.006  | 93.949 | 64.130 | 1.00 | 30.98 | C |
| ATOM | 12353 | C   | SER | D | 317 | 4.733  | 95.407 | 64.472 | 1.00 | 32.06 | C |
| ATOM | 12354 | O   | SER | D | 317 | 3.754  | 95.719 | 65.146 | 1.00 | 32.14 | O |
| ATOM | 12355 | CB  | SER | D | 317 | 5.187  | 93.138 | 65.415 | 1.00 | 32.31 | C |
| ATOM | 12356 | OG  | SER | D | 317 | 5.156  | 91.744 | 65.151 | 1.00 | 32.34 | O |
| ATOM | 12357 | N   | PHE | D | 318 | 5.624  | 96.289 | 64.021 | 1.00 | 32.95 | N |
| ATOM | 12358 | CA  | PHE | D | 318 | 5.471  | 97.727 | 64.234 | 1.00 | 34.25 | C |
| ATOM | 12359 | C   | PHE | D | 318 | 4.967  | 98.304 | 62.919 | 1.00 | 35.81 | C |

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ATOM   12360  O    PHE D 318      5.355  97.838  61.845  1.00 36.52           O
ATOM   12361  CB   PHE D 318      6.808  98.428  64.528  1.00 33.37           C
ATOM   12362  CG   PHE D 318      7.524  97.938  65.757  1.00 34.33           C
ATOM   12363  CD1  PHE D 318      6.830  97.652  66.932  1.00 32.95           C
ATOM   12364  CD2  PHE D 318      8.917  97.825  65.752  1.00 32.37           C
ATOM   12365  CE1  PHE D 318      7.515  97.263  68.082  1.00 32.98           C
ATOM   12366  CE2  PHE D 318      9.608  97.439  66.896  1.00 32.18           C
ATOM   12367  CZ   PHE D 318      8.907  97.157  68.063  1.00 31.01           C
ATOM   12368  N    ASN D 319      4.105  99.310  63.003  1.00 36.66           N
ATOM   12369  CA   ASN D 319      3.597  99.979  61.814  1.00 37.54           C
ATOM   12370  C    ASN D 319      4.549 101.166  61.681  1.00 38.36           C
ATOM   12371  O    ASN D 319      4.253 102.274  62.131  1.00 40.39           O
ATOM   12372  CB   ASN D 319      2.162 100.449  62.054  1.00 37.90           C
ATOM   12373  CG   ASN D 319      1.539 101.084  60.828  1.00 37.48           C
ATOM   12374  OD1  ASN D 319      0.322 101.263  60.766  1.00 40.08           O
ATOM   12375  ND2  ASN D 319      2.366 101.433  59.848  1.00 35.19           N
ATOM   12376  N    TRP D 320      5.700 100.918  61.068  1.00 37.16           N
ATOM   12377  CA   TRP D 320      6.738 101.928  60.922  1.00 38.56           C
ATOM   12378  C    TRP D 320      6.361 103.356  60.544  1.00 39.90           C
ATOM   12379  O    TRP D 320      6.674 104.285  61.288  1.00 40.72           O
ATOM   12380  CB   TRP D 320      7.830 101.405  59.992  1.00 36.99           C
ATOM   12381  CG   TRP D 320      8.548 100.241  60.606  1.00 36.55           C
ATOM   12382  CD1  TRP D 320      8.092  98.955  60.704  1.00 35.97           C
ATOM   12383  CD2  TRP D 320      9.804 100.275  61.292  1.00 34.96           C
ATOM   12384  NE1  TRP D 320      8.985  98.189  61.413  1.00 35.91           N
ATOM   12385  CE2  TRP D 320     10.045  98.973  61.787  1.00 36.26           C
ATOM   12386  CE3  TRP D 320     10.748 101.280  61.541  1.00 35.16           C
ATOM   12387  CZ2  TRP D 320     11.195  98.650  62.521  1.00 34.53           C
ATOM   12388  CZ3  TRP D 320     11.893 100.958  62.271  1.00 35.24           C
ATOM   12389  CH2  TRP D 320     12.103  99.652  62.752  1.00 35.35           C
ATOM   12390  N    LYS D 321      5.703 103.558  59.408  1.00 41.45           N
ATOM   12391  CA   LYS D 321      5.342 104.920  59.028  1.00 42.57           C
ATOM   12392  C    LYS D 321      4.325 105.563  59.974  1.00 43.47           C
ATOM   12393  O    LYS D 321      4.080 106.768  59.904  1.00 44.02           O
ATOM   12394  CB   LYS D 321      4.832 104.961  57.585  1.00 41.71           C
ATOM   12395  CG   LYS D 321      5.934 104.735  56.559  1.00 42.19           C
ATOM   12396  CD   LYS D 321      5.464 105.016  55.142  1.00 43.74           C
ATOM   12397  CE   LYS D 321      5.117 106.487  54.947  1.00 45.22           C
ATOM   12398  NZ   LYS D 321      6.282 107.374  55.242  1.00 48.32           N
ATOM   12399  N    LYS D 322      3.744 104.766  60.866  1.00 43.59           N
ATOM   12400  CA   LYS D 322      2.777 105.287  61.827  1.00 44.27           C
ATOM   12401  C    LYS D 322      3.502 105.806  63.070  1.00 44.41           C
ATOM   12402  O    LYS D 322      2.927 106.530  63.882  1.00 44.35           O
ATOM   12403  CB   LYS D 322      1.781 104.196  62.234  1.00 45.52           C
ATOM   12404  CG   LYS D 322      0.803 104.631  63.321  1.00 47.34           C
ATOM   12405  CD   LYS D 322     -0.113 103.495  63.741  1.00 49.43           C
ATOM   12406  CE   LYS D 322     -1.049 103.927  64.857  1.00 50.47           C
ATOM   12407  NZ   LYS D 322     -1.976 102.834  65.257  1.00 51.09           N
ATOM   12408  N    HIS D 323      4.771 105.442  63.206  1.00 44.40           N
ATOM   12409  CA   HIS D 323      5.563 105.868  64.350  1.00 44.46           C
ATOM   12410  C    HIS D 323      6.688 106.825  63.972  1.00 44.43           C
ATOM   12411  O    HIS D 323      6.950 107.796  64.684  1.00 45.74           O
ATOM   12412  CB   HIS D 323      6.165 104.650  65.063  1.00 46.17           C
ATOM   12413  CG   HIS D 323      5.164 103.828  65.813  1.00 47.45           C
ATOM   12414  ND1  HIS D 323      4.478 104.309  66.908  1.00 48.82           N
ATOM   12415  CD2  HIS D 323      4.724 102.562  65.620  1.00 48.75           C
ATOM   12416  CE1  HIS D 323      3.658 103.376  67.357  1.00 49.54           C
ATOM   12417  NE2  HIS D 323      3.787 102.306  66.593  1.00 49.56           N
ATOM   12418  N    LEU D 324      7.352 106.561  62.853  1.00 42.57           N
ATOM   12419  CA   LEU D 324      8.465 107.404  62.443  1.00 40.97           C
ATOM   12420  C    LEU D 324      8.291 108.038  61.072  1.00 41.65           C
ATOM   12421  O    LEU D 324      7.388 107.679  60.311  1.00 41.18           O
ATOM   12422  CB   LEU D 324      9.757 106.584  62.456  1.00 40.25           C
ATOM   12423  CG   LEU D 324     10.041 105.775  63.730  1.00 38.25           C
ATOM   12424  CD1  LEU D 324     11.261 104.895  63.509  1.00 37.72           C
ATOM   12425  CD2  LEU D 324     10.260 106.707  64.909  1.00 37.60           C
ATOM   12426  N    ASP D 325      9.163 108.998  60.774  1.00 41.50           N
ATOM   12427  CA   ASP D 325      9.152 109.675  59.488  1.00 41.58           C
ATOM   12428  C    ASP D 325     10.246 109.018  58.662  1.00 40.91           C
ATOM   12429  O    ASP D 325     11.102 108.322  59.206  1.00 40.73           O
ATOM   12430  CB   ASP D 325      9.425 111.176  59.650  1.00 42.50           C
ATOM   12431  CG   ASP D 325     10.711 111.467  60.399  1.00 44.56           C
ATOM   12432  OD1  ASP D 325     11.774 110.935  60.012  1.00 46.80           O
ATOM   12433  OD2  ASP D 325     10.662 112.245  61.375  1.00 47.84           O
ATOM   12434  N    ASP D 326     10.225 109.239  57.354  1.00 40.79           N
ATOM   12435  CA   ASP D 326     11.209 108.625  56.475  1.00 41.20           C
ATOM   12436  C    ASP D 326     12.660 108.972  56.808  1.00 40.99           C
ATOM   12437  O    ASP D 326     13.572 108.199  56.511  1.00 41.27           O
ATOM   12438  CB   ASP D 326     10.891 108.976  55.017  1.00 40.34           C
ATOM   12439  CG   ASP D 326      9.475 108.582  54.624  1.00 40.84           C
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ATOM  12440  OD1 ASP D 326      8.977 107.560  55.149  1.00 40.99           O
ATOM  12441  OD2 ASP D 326      8.862 109.282  53.788  1.00 40.18           O
ATOM  12442  N   ALA-D 327     12.874 110.123  57.436  1.00 40.95           N
ATOM  12443  CA  ALA D 327     14.226 110.544  57.800  1.00 40.31           C
ATOM  12444  C   ALA D 327     14.777 109.677  58.930  1.00 39.39           C
ATOM  12445  O   ALA D 327     15.924 109.227  58.885  1.00 39.69           O
ATOM  12446  CB  ALA D 327     14.216 112.012  58.224  1.00 41.09           C
ATOM  12447  N   THR D 328     13.953 109.455  59.947  1.00 38.68           N
ATOM  12448  CA  THR D 328     14.351 108.644  61.091  1.00 37.78           C
ATOM  12449  C   THR D 328     14.461 107.185  60.664  1.00 36.64           C
ATOM  12450  O   THR D 328     15.419 106.498  61.015  1.00 37.37           O
ATOM  12451  CB  THR D 328     13.325 108.760  62.233  1.00 38.30           C
ATOM  12452  OG1 THR D 328     13.136 110.141  62.564  1.00 37.89           O
ATOM  12453  CG2 THR D 328     13.818 108.015  63.461  1.00 37.81           C
ATOM  12454  N   ILE D 329     13.476 106.727  59.895  1.00 34.51           N
ATOM  12455  CA  ILE D 329     13.452 105.360  59.388  1.00 32.85           C
ATOM  12456  C   ILE D 329     14.753 105.018  58.668  1.00 33.46           C
ATOM  12457  O   ILE D 329     15.304 103.929  58.843  1.00 35.15           O
ATOM  12458  CB  ILE D 329     12.281 105.158  58.395  1.00 32.23           C
ATOM  12459  CG1 ILE D 329     10.947 105.334  59.119  1.00 29.64           C
ATOM  12460  CG2 ILE D 329     12.370 103.778  57.750  1.00 31.31           C
ATOM  12461  CD1 ILE D 329      9.733 105.141  58.230  1.00 32.74           C
ATOM  12462  N   ALA D 330     15.240 105.961  57.867  1.00 32.37           N
ATOM  12463  CA  ALA D 330     16.462 105.777  57.088  1.00 32.27           C
ATOM  12464  C   ALA D 330     17.748 105.715  57.905  1.00 32.64           C
ATOM  12465  O   ALA D 330     18.724 105.087  57.490  1.00 32.74           O
ATOM  12466  CB  ALA D 330     16.576 106.893  56.042  1.00 31.68           C
ATOM  12467  N   LYS D 331     17.762 106.371  59.059  1.00 32.83           N
ATOM  12468  CA  LYS D 331     18.962 106.376  59.891  1.00 33.88           C
ATOM  12469  C   LYS D 331     18.844 105.413  61.063  1.00 32.89           C
ATOM  12470  O   LYS D 331     19.835 105.104  61.720  1.00 32.41           O
ATOM  12471  CB  LYS D 331     19.230 107.789  60.426  1.00 35.34           C
ATOM  12472  CG  LYS D 331     18.132 108.330  61.335  1.00 37.73           C
ATOM  12473  CD  LYS D 331     18.490 109.709  61.876  1.00 39.97           C
ATOM  12474  CE  LYS D 331     17.444 110.214  62.860  1.00 41.20           C
ATOM  12475  NZ  LYS D 331     17.810 111.549  63.419  1.00 42.30           N
ATOM  12476  N   PHE D 332     17.629 104.938  61.308  1.00 32.71           N
ATOM  12477  CA  PHE D 332     17.354 104.035  62.422  1.00 33.52           C
ATOM  12478  C   PHE D 332     18.476 103.061  62.776  1.00 32.82           C
ATOM  12479  O   PHE D 332     19.057 103.146  63.860  1.00 33.98           O
ATOM  12480  CB  PHE D 332     16.071 103.246  62.159  1.00 34.22           C
ATOM  12481  CG  PHE D 332     15.435 102.702  63.406  1.00 36.02           C
ATOM  12482  CD1 PHE D 332     14.840 103.561  64.326  1.00 35.75           C
ATOM  12483  CD2 PHE D 332     15.433 101.334  63.667  1.00 35.68           C
ATOM  12484  CE1 PHE D 332     14.249 103.064  65.488  1.00 37.17           C
ATOM  12485  CE2 PHE D 332     14.846 100.829  64.826  1.00 35.77           C
ATOM  12486  CZ  PHE D 332     14.253 101.694  65.737  1.00 35.86           C
ATOM  12487  N   GLN D 333     18.784 102.139  61.869  1.00 31.66           N
ATOM  12488  CA  GLN D 333     19.822 101.150  62.127  1.00 30.65           C
ATOM  12489  C   GLN D 333     21.198 101.745  62.376  1.00 31.37           C
ATOM  12490  O   GLN D 333     21.953 101.240  63.204  1.00 31.96           O
ATOM  12491  CB  GLN D 333     19.913 100.146  60.976  1.00 28.97           C
ATOM  12492  CG  GLN D 333     18.660  99.315  60.778  1.00 28.86           C
ATOM  12493  CD  GLN D 333     18.970  97.891  60.348  1.00 28.28           C
ATOM  12494  OE1 GLN D 333     19.920  97.648  59.612  1.00 30.35           O
ATOM  12495  NE2 GLN D 333     18.156  96.945  60.802  1.00 30.84           N
ATOM  12496  N   LYS D 334     21.536 102.808  61.656  1.00 32.58           N
ATOM  12497  CA  LYS D 334     22.837 103.432  61.837  1.00 34.57           C
ATOM  12498  C   LYS D 334     22.930 104.031  63.235  1.00 34.75           C
ATOM  12499  O   LYS D 334     23.979 103.978  63.876  1.00 33.57           O
ATOM  12500  CB  LYS D 334     23.066 104.523  60.789  1.00 36.95           C
ATOM  12501  CG  LYS D 334     24.474 105.101  60.829  1.00 39.22           C
ATOM  12502  CD  LYS D 334     24.679 106.167  59.765  1.00 42.62           C
ATOM  12503  CE  LYS D 334     26.054 106.810  59.900  1.00 42.84           C
ATOM  12504  NZ  LYS D 334     27.144 105.804  59.778  1.00 44.19           N
ATOM  12505  N   GLU D 335     21.822 104.595  63.703  1.00 34.70           N
ATOM  12506  CA  GLU D 335     21.770 105.194  65.030  1.00 35.71           C
ATOM  12507  C   GLU D 335     21.970 104.110  66.090  1.00 35.07           C
ATOM  12508  O   GLU D 335     22.864 104.208  66.938  1.00 35.03           O
ATOM  12509  CB  GLU D 335     20.422 105.893  65.232  1.00 37.14           C
ATOM  12510  CG  GLU D 335     20.224 107.113  64.341  1.00 42.30           C
ATOM  12511  CD  GLU D 335     21.087 108.291  64.767  1.00 45.33           C
ATOM  12512  OE1 GLU D 335     20.801 108.873  65.837  1.00 46.36           O
ATOM  12513  OE2 GLU D 335     22.050 108.629  64.041  1.00 47.23           O
ATOM  12514  N   LEU D 336     21.139 103.073  66.028  1.00 33.83           N
ATOM  12515  CA  LEU D 336     21.224 101.964  66.971  1.00 32.27           C
ATOM  12516  C   LEU D 336     22.647 101.418  67.060  1.00 31.87           C
ATOM  12517  O   LEU D 336     23.127 101.073  68.138  1.00 32.75           O
ATOM  12518  CB  LEU D 336     20.268 100.847  66.547  1.00 32.25           C
ATOM  12519  CG  LEU D 336     18.776 101.170  66.622  1.00 30.12           C
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ATOM  12520  CD1 LEU D 336    17.971  99.976  66.142  1.00 32.29        C
ATOM  12521  CD2 LEU D 336    18.404 101.512  68.050  1.00 31.75        C
ATOM  12522  N   ALA D 337    23.319 101.335  65.918  1.00 31.69        N
ATOM  12523  CA  ALA D 337    24.685 100.834  65.884  1.00 31.41        C
ATOM  12524  C   ALA D 337    25.554 101.778  66.699  1.00 32.84        C
ATOM  12525  O   ALA D 337    26.421 101.352  67.464  1.00 32.72        O
ATOM  12526  CB  ALA D 337    25.181 100.775  64.449  1.00 29.64        C
ATOM  12527  N   ALA D 338    25.303 103.070  66.530  1.00 34.43        N
ATOM  12528  CA  ALA D 338    26.047 104.098  67.235  1.00 36.03        C
ATOM  12529  C   ALA D 338    25.826 103.996  68.740  1.00 37.10        C
ATOM  12530  O   ALA D 338    26.567 104.591  69.519  1.00 39.23        O
ATOM  12531  CB  ALA D 338    25.627 105.471  66.735  1.00 35.66        C
ATOM  12532  N   MET D 339    24.811 103.241  69.150  1.00 36.43        N
ATOM  12533  CA  MET D 339    24.525 103.088  70.570  1.00 34.90        C
ATOM  12534  C   MET D 339    24.829 101.694  71.119  1.00 33.88        C
ATOM  12535  O   MET D 339    24.356 101.326  72.195  1.00 34.74        O
ATOM  12536  CB  MET D 339    23.069 103.460  70.852  1.00 35.41        C
ATOM  12537  CG  MET D 339    22.730 104.876  70.438  1.00 36.34        C
ATOM  12538  SD  MET D 339    21.077 105.348  70.918  1.00 41.52        S
ATOM  12539  CE  MET D 339    20.123 104.294  69.812  1.00 37.57        C
ATOM  12540  N   GLY D 340    25.618 100.921  70.381  1.00 32.16        N
ATOM  12541  CA  GLY D 340    25.986  99.596  70.849  1.00 31.09        C
ATOM  12542  C   GLY D 340    25.170  98.413  70.360  1.00 30.03        C
ATOM  12543  O   GLY D 340    25.473  97.274  70.717  1.00 29.44        O
ATOM  12544  N   PHE D 341    24.134  98.664  69.566  1.00 29.47        N
ATOM  12545  CA  PHE D 341    23.308  97.580  69.037  1.00 29.05        C
ATOM  12546  C   PHE D 341    24.000  97.037  67.792  1.00 28.46        C
ATOM  12547  O   PHE D 341    23.721  97.470  66.677  1.00 29.49        O
ATOM  12548  CB  PHE D 341    21.914  98.113  68.705  1.00 29.18        C
ATOM  12549  CG  PHE D 341    21.135  98.544  69.914  1.00 29.80        C
ATOM  12550  CD1 PHE D 341    20.534  97.602  70.744  1.00 32.11        C
ATOM  12551  CD2 PHE D 341    21.020  99.891  70.242  1.00 32.14        C
ATOM  12552  CE1 PHE D 341    19.827  97.995  71.888  1.00 31.86        C
ATOM  12553  CE2 PHE D 341    20.315 100.296  71.384  1.00 32.30        C
ATOM  12554  CZ  PHE D 341    19.718  99.344  72.206  1.00 32.00        C
ATOM  12555  N   LYS D 342    24.906  96.083  67.997  1.00 28.72        N
ATOM  12556  CA  LYS D 342    25.691  95.498  66.912  1.00 29.28        C
ATOM  12557  C   LYS D 342    25.033  94.412  66.057  1.00 28.95        C
ATOM  12558  O   LYS D 342    25.553  94.051  64.996  1.00 27.35        O
ATOM  12559  CB  LYS D 342    27.020  94.981  67.467  1.00 30.89        C
ATOM  12560  CG  LYS D 342    27.862  96.071  68.112  1.00 33.88        C
ATOM  12561  CD  LYS D 342    28.048  97.242  67.152  1.00 35.75        C
ATOM  12562  CE  LYS D 342    28.932  98.318  67.750  1.00 37.45        C
ATOM  12563  NZ  LYS D 342    29.136  99.451  66.801  1.00 38.99        N
ATOM  12564  N   PHE D 343    23.914  93.867  66.518  1.00 27.07        N
ATOM  12565  CA  PHE D 343    23.217  92.866  65.725  1.00 26.18        C
ATOM  12566  C   PHE D 343    21.783  93.329  65.569  1.00 25.26        C
ATOM  12567  O   PHE D 343    21.035  93.417  66.543  1.00 26.48        O
ATOM  12568  CB  PHE D 343    23.245  91.479  66.379  1.00 25.16        C
ATOM  12569  CG  PHE D 343    22.646  90.409  65.510  1.00 24.78        C
ATOM  12570  CD1 PHE D 343    23.266  90.040  64.317  1.00 24.90        C
ATOM  12571  CD2 PHE D 343    21.423  89.831  65.835  1.00 24.55        C
ATOM  12572  CE1 PHE D 343    22.673  89.115  63.456  1.00 24.64        C
ATOM  12573  CE2 PHE D 343    20.819  88.904  64.983  1.00 24.66        C
ATOM  12574  CZ  PHE D 343    21.445  88.547  63.791  1.00 26.00        C
ATOM  12575  N   GLN D 344    21.402  93.645  64.340  1.00 23.84        N
ATOM  12576  CA  GLN D 344    20.053  94.118  64.086  1.00 26.20        C
ATOM  12577  C   GLN D 344    19.391  93.193  63.088  1.00 24.19        C
ATOM  12578  O   GLN D 344    20.057  92.663  62.208  1.00 25.25        O
ATOM  12579  CB  GLN D 344    20.119  95.560  63.579  1.00 26.96        C
ATOM  12580  CG  GLN D 344    21.031  96.411  64.467  1.00 27.15        C
ATOM  12581  CD  GLN D 344    21.102  97.864  64.063  1.00 27.88        C
ATOM  12582  OE1 GLN D 344    22.022  98.577  64.461  1.00 28.85        O
ATOM  12583  NE2 GLN D 344    20.128  98.319  63.288  1.00 26.95        N
ATOM  12584  N   PHE D 345    18.085  92.989  63.227  1.00 23.95        N
ATOM  12585  CA  PHE D 345    17.385  92.078  62.332  1.00 22.48        C
ATOM  12586  C   PHE D 345    15.891  92.324  62.214  1.00 22.58        C
ATOM  12587  O   PHE D 345    15.244  92.770  63.160  1.00 24.84        O
ATOM  12588  CB  PHE D 345    17.599  90.637  62.812  1.00 22.70        C
ATOM  12589  CG  PHE D 345    17.255  90.432  64.268  1.00 22.94        C
ATOM  12590  CD1 PHE D 345    18.123  90.864  65.270  1.00 21.08        C
ATOM  12591  CD2 PHE D 345    16.036  89.868  64.636  1.00 22.70        C
ATOM  12592  CE1 PHE D 345    17.780  90.744  66.618  1.00 23.17        C
ATOM  12593  CE2 PHE D 345    15.681  89.743  65.983  1.00 23.22        C
ATOM  12594  CZ  PHE D 345    16.556  90.183  66.977  1.00 22.58        C
ATOM  12595  N   ILE D 346    15.351  92.022  61.039  1.00 22.84        N
ATOM  12596  CA  ILE D 346    13.922  92.142  60.790  1.00 22.58        C
ATOM  12597  C   ILE D 346    13.402  90.698  60.851  1.00 23.58        C
ATOM  12598  O   ILE D 346    13.517  89.929  59.890  1.00 21.35        O
ATOM  12599  CB  ILE D 346    13.635  92.747  59.403  1.00 22.38        C
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| ATOM | 12600 | CG1 | ILE | D | 346 | 14.205 | 94.167 | 59.332 | 1.00 | 23.64 | C |
|------|-------|-----|-----|---|-----|--------|--------|--------|------|-------|---|
| ATOM | 12601 | CG2 | ILE | D | 346 | 12.136 | 92.777 | 59.152 | 1.00 | 22.50 | C |
| ATOM | 12602 | CD1 | ILE | D | 346 | 13.966 | 94.857 | 58.003 | 1.00 | 22.03 | C |
| ATOM | 12603 | N | THR | D | 347 | 12.842 | 90.344 | 62.006 | 1.00 | 22.95 | N |
| ATOM | 12604 | CA | THR | D | 347 | 12.330 | 89.008 | 62.270 | 1.00 | 21.89 | C |
| ATOM | 12605 | C | THR | D | 347 | 11.438 | 88.335 | 61.229 | 1.00 | 22.17 | C |
| ATOM | 12606 | O | THR | D | 347 | 11.694 | 87.192 | 60.844 | 1.00 | 20.29 | O |
| ATOM | 12607 | CB | THR | D | 347 | 11.574 | 88.993 | 63.592 | 1.00 | 21.88 | C |
| ATOM | 12608 | OG1 | THR | D | 347 | 10.540 | 89.981 | 63.546 | 1.00 | 22.12 | O |
| ATOM | 12609 | CG2 | THR | D | 347 | 12.516 | 89.286 | 64.749 | 1.00 | 18.65 | C |
| ATOM | 12610 | N | LEU | D | 348 | 10.396 | 89.027 | 60.777 | 1.00 | 21.83 | N |
| ATOM | 12611 | CA | LEU | D | 348 | 9.465 | 88.433 | 59.821 | 1.00 | 23.67 | C |
| ATOM | 12612 | C | LEU | D | 348 | 9.634 | 88.862 | 58.362 | 1.00 | 24.85 | C |
| ATOM | 12613 | O | LEU | D | 348 | 8.669 | 88.859 | 57.596 | 1.00 | 24.00 | O |
| ATOM | 12614 | CB | LEU | D | 348 | 8.025 | 88.704 | 60.276 | 1.00 | 23.22 | C |
| ATOM | 12615 | CG | LEU | D | 348 | 7.763 | 88.490 | 61.773 | 1.00 | 24.10 | C |
| ATOM | 12616 | CD1 | LEU | D | 348 | 6.275 | 88.629 | 62.078 | 1.00 | 21.73 | C |
| ATOM | 12617 | CD2 | LEU | D | 348 | 8.262 | 87.114 | 62.181 | 1.00 | 21.37 | C |
| ATOM | 12618 | N | ALA | D | 349 | 10.858 | 89.212 | 57.978 | 1.00 | 24.47 | N |
| ATOM | 12619 | CA | ALA | D | 349 | 11.137 | 89.635 | 56.610 | 1.00 | 25.07 | C |
| ATOM | 12620 | C | ALA | D | 349 | 10.738 | 88.571 | 55.578 | 1.00 | 25.03 | C |
| ATOM | 12621 | O | ALA | D | 349 | 10.121 | 88.884 | 54.554 | 1.00 | 26.42 | O |
| ATOM | 12622 | CB | ALA | D | 349 | 12.624 | 89.976 | 56.464 | 1.00 | 23.93 | C |
| ATOM | 12623 | N | GLY | D | 350 | 11.089 | 87.318 | 55.849 | 1.00 | 25.11 | N |
| ATOM | 12624 | CA | GLY | D | 350 | 10.762 | 86.237 | 54.929 | 1.00 | 23.13 | C |
| ATOM | 12625 | C | GLY | D | 350 | 9.277 | 85.953 | 54.811 | 1.00 | 22.68 | C |
| ATOM | 12626 | O | GLY | D | 350 | 8.767 | 85.702 | 53.714 | 1.00 | 23.59 | O |
| ATOM | 12627 | N | PHE | D | 351 | 8.577 | 85.977 | 55.939 | 1.00 | 20.67 | N |
| ATOM | 12628 | CA | PHE | D | 351 | 7.141 | 85.725 | 55.937 | 1.00 | 22.69 | C |
| ATOM | 12629 | C | PHE | D | 351 | 6.419 | 86.741 | 55.068 | 1.00 | 22.21 | C |
| ATOM | 12630 | O | PHE | D | 351 | 5.572 | 86.382 | 54.248 | 1.00 | 23.33 | O |
| ATOM | 12631 | CB | PHE | D | 351 | 6.572 | 85.802 | 57.357 | 1.00 | 21.09 | C |
| ATOM | 12632 | CG | PHE | D | 351 | 5.065 | 85.832 | 57.409 | 1.00 | 22.63 | C |
| ATOM | 12633 | CD1 | PHE | D | 351 | 4.329 | 84.652 | 57.424 | 1.00 | 22.44 | C |
| ATOM | 12634 | CD2 | PHE | D | 351 | 4.379 | 87.050 | 57.452 | 1.00 | 22.87 | C |
| ATOM | 12635 | CE1 | PHE | D | 351 | 2.934 | 84.678 | 57.484 | 1.00 | 22.04 | C |
| ATOM | 12636 | CE2 | PHE | D | 351 | 2.983 | 87.087 | 57.511 | 1.00 | 20.20 | C |
| ATOM | 12637 | CZ | PHE | D | 351 | 2.261 | 85.900 | 57.529 | 1.00 | 23.23 | C |
| ATOM | 12638 | N | HIS | D | 352 | 6.749 | 88.014 | 55.255 | 1.00 | 22.63 | N |
| ATOM | 12639 | CA | HIS | D | 352 | 6.103 | 89.085 | 54.487 | 1.00 | 20.91 | C |
| ATOM | 12640 | C | HIS | D | 352 | 6.547 | 89.085 | 53.039 | 1.00 | 20.13 | C |
| ATOM | 12641 | O | HIS | D | 352 | 5.731 | 89.274 | 52.144 | 1.00 | 22.48 | O |
| ATOM | 12642 | CB | HIS | D | 352 | 6.333 | 90.427 | 55.155 | 1.00 | 19.08 | C |
| ATOM | 12643 | CG | HIS | D | 352 | 5.488 | 90.634 | 56.373 | 1.00 | 16.61 | C |
| ATOM | 12644 | ND1 | HIS | D | 352 | 4.118 | 90.767 | 56.307 | 1.00 | 16.99 | N |
| ATOM | 12645 | CD2 | HIS | D | 352 | 5.800 | 90.619 | 57.691 | 1.00 | 18.59 | C |
| ATOM | 12646 | CE1 | HIS | D | 352 | 3.620 | 90.817 | 57.531 | 1.00 | 16.39 | C |
| ATOM | 12647 | NE2 | HIS | D | 352 | 4.620 | 90.728 | 58.390 | 1.00 | 17.78 | N |
| ATOM | 12648 | N | ALA | D | 353 | 7.828 | 88.868 | 52.793 | 1.00 | 20.46 | N |
| ATOM | 12649 | CA | ALA | D | 353 | 8.297 | 88.859 | 51.417 | 1.00 | 20.99 | C |
| ATOM | 12650 | C | ALA | D | 353 | 7.623 | 87.707 | 50.667 | 1.00 | 22.91 | C |
| ATOM | 12651 | O | ALA | D | 353 | 7.176 | 87.875 | 49.529 | 1.00 | 24.41 | O |
| ATOM | 12652 | CB | ALA | D | 353 | 9.810 | 88.708 | 51.373 | 1.00 | 20.72 | C |
| ATOM | 12653 | N | LEU | D | 354 | 7.529 | 86.546 | 51.316 | 1.00 | 21.82 | N |
| ATOM | 12654 | CA | LEU | D | 354 | 6.919 | 85.373 | 50.690 | 1.00 | 21.98 | C |
| ATOM | 12655 | C | LEU | D | 354 | 5.408 | 85.501 | 50.507 | 1.00 | 22.42 | C |
| ATOM | 12656 | O | LEU | D | 354 | 4.866 | 85.193 | 49.440 | 1.00 | 23.66 | O |
| ATOM | 12657 | CB | LEU | D | 354 | 7.242 | 84.112 | 51.511 | 1.00 | 19.63 | C |
| ATOM | 12658 | CG | LEU | D | 354 | 6.721 | 82.759 | 51.011 | 1.00 | 17.73 | C |
| ATOM | 12659 | CD1 | LEU | D | 354 | 7.534 | 81.623 | 51.628 | 1.00 | 15.08 | C |
| ATOM | 12660 | CD2 | LEU | D | 354 | 5.249 | 82.614 | 51.359 | 1.00 | 18.27 | C |
| ATOM | 12661 | N | ASN | D | 355 | 4.720 | 85.946 | 51.549 | 1.00 | 22.40 | N |
| ATOM | 12662 | CA | ASN | D | 355 | 3.277 | 86.080 | 51.468 | 1.00 | 22.40 | C |
| ATOM | 12663 | C | ASN | D | 355 | 2.873 | 87.160 | 50.476 | 1.00 | 23.10 | C |
| ATOM | 12664 | O | ASN | D | 355 | 2.019 | 86.928 | 49.621 | 1.00 | 22.30 | O |
| ATOM | 12665 | CB | ASN | D | 355 | 2.699 | 86.362 | 52.859 | 1.00 | 21.81 | C |
| ATOM | 12666 | CG | ASN | D | 355 | 2.504 | 85.088 | 53.676 | 1.00 | 21.69 | C |
| ATOM | 12667 | OD1 | ASN | D | 355 | 1.467 | 84.425 | 53.579 | 1.00 | 22.69 | O |
| ATOM | 12668 | ND2 | ASN | D | 355 | 3.508 | 84.731 | 54.471 | 1.00 | 19.48 | N |
| ATOM | 12669 | N | TYR | D | 356 | 3.498 | 88.330 | 50.560 | 1.00 | 24.93 | N |
| ATOM | 12670 | CA | TYR | D | 356 | 3.148 | 89.401 | 49.637 | 1.00 | 25.22 | C |
| ATOM | 12671 | C | TYR | D | 356 | 3.445 | 89.051 | 48.178 | 1.00 | 25.41 | C |
| ATOM | 12672 | O | TYR | D | 356 | 2.564 | 89.144 | 47.319 | 1.00 | 25.65 | O |
| ATOM | 12673 | CB | TYR | D | 356 | 3.871 | 90.706 | 49.985 | 1.00 | 25.68 | C |
| ATOM | 12674 | CG | TYR | D | 356 | 3.525 | 91.790 | 48.992 | 1.00 | 28.79 | C |
| ATOM | 12675 | CD1 | TYR | D | 356 | 2.241 | 92.338 | 48.954 | 1.00 | 28.52 | C |
| ATOM | 12676 | CD2 | TYR | D | 356 | 4.435 | 92.182 | 48.010 | 1.00 | 28.89 | C |
| ATOM | 12677 | CE1 | TYR | D | 356 | 1.869 | 93.239 | 47.956 | 1.00 | 31.14 | C |
| ATOM | 12678 | CE2 | TYR | D | 356 | 4.071 | 93.085 | 47.006 | 1.00 | 30.02 | C |
| ATOM | 12679 | CZ | TYR | D | 356 | 2.787 | 93.604 | 46.983 | 1.00 | 30.37 | C |

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ATOM  12680  OH  TYR D 356    2.410  94.461  45.971  1.00 32.72       O
ATOM  12681  N   SER D 357    4.681  88.651  47.900  1.00 24.08       N
ATOM  12682  CA  SER D 357    5.082  88.308  46.538  1.00 25.87       C
ATOM  12683  C   SER D 357    4.154  87.308  45.843  1.00 25.28       C
ATOM  12684  O   SER D 357    3.856  87.448  44.656  1.00 26.26       O
ATOM  12685  CB  SER D 357    6.499  87.739  46.537  1.00 26.00       C
ATOM  12686  OG  SER D 357    6.529  86.522  47.260  1.00 25.81       O
ATOM  12687  N   MET D 358    3.713  86.288  46.571  1.00 24.98       N
ATOM  12688  CA  MET D 358    2.837  85.283  45.982  1.00 22.05       C
ATOM  12689  C   MET D 358    1.423  85.812  45.821  1.00 22.36       C
ATOM  12690  O   MET D 358    0.732  85.473  44.855  1.00 22.84       O
ATOM  12691  CB  MET D 358    2.826  84.006  46.826  1.00 20.87       C
ATOM  12692  CG  MET D 358    2.021  82.869  46.205  1.00 19.83       C
ATOM  12693  SD  MET D 358    2.378  82.607  44.442  1.00 22.73       S
ATOM  12694  CE  MET D 358    4.046  81.923  44.495  1.00 18.76       C
ATOM  12695  N   PHE D 359    0.980  86.635  46.765  1.00 22.35       N
ATOM  12696  CA  PHE D 359   -0.354  87.201  46.653  1.00 23.70       C
ATOM  12697  C   PHE D 359   -0.401  88.079  45.406  1.00 24.07       C
ATOM  12698  O   PHE D 359   -1.330  87.997  44.609  1.00 25.37       O
ATOM  12699  CB  PHE D 359   -0.703  88.075  47.856  1.00 23.92       C
ATOM  12700  CG  PHE D 359   -2.014  88.780  47.702  1.00 24.80       C
ATOM  12701  CD1 PHE D 359   -3.208  88.113  47.955  1.00 23.46       C
ATOM  12702  CD2 PHE D 359   -2.064  90.081  47.199  1.00 25.89       C
ATOM  12703  CE1 PHE D 359   -4.433  88.725  47.703  1.00 24.22       C
ATOM  12704  CE2 PHE D 359   -3.288  90.703  46.942  1.00 25.42       C
ATOM  12705  CZ  PHE D 359   -4.474  90.023  47.193  1.00 24.32       C
ATOM  12706  N   ASP D 360    0.608  88.927  45.257  1.00 24.63       N
ATOM  12707  CA  ASP D 360    0.691  89.838  44.121  1.00 26.83       C
ATOM  12708  C   ASP D 360    0.685  89.067  42.795  1.00 26.88       C
ATOM  12709  O   ASP D 360   -0.112  89.361  41.903  1.00 27.93       O
ATOM  12710  CB  ASP D 360    1.952  90.707  44.244  1.00 26.82       C
ATOM  12711  CG  ASP D 360    2.026  91.792  43.185  1.00 28.32       C
ATOM  12712  OD1 ASP D 360    1.032  92.524  43.001  1.00 28.38       O
ATOM  12713  OD2 ASP D 360    3.085  91.920  42.543  1.00 30.71       O
ATOM  12714  N   LEU D 361    1.557  88.070  42.666  1.00 26.88       N
ATOM  12715  CA  LEU D 361    1.602  87.285  41.434  1.00 25.70       C
ATOM  12716  C   LEU D 361    0.271  86.581  41.182  1.00 26.37       C
ATOM  12717  O   LEU D 361   -0.306  86.685  40.095  1.00 26.49       O
ATOM  12718  CB  LEU D 361    2.716  86.241  41.494  1.00 25.58       C
ATOM  12719  CG  LEU D 361    2.743  85.260  40.312  1.00 27.72       C
ATOM  12720  CD1 LEU D 361    2.958  86.020  38.998  1.00 28.29       C
ATOM  12721  CD2 LEU D 361    3.850  84.241  40.521  1.00 26.68       C
ATOM  12722  N   ALA D 362   -0.216  85.875  42.196  1.00 25.16       N
ATOM  12723  CA  ALA D 362   -1.467  85.135  42.083  1.00 25.05       C
ATOM  12724  C   ALA D 362   -2.655  86.014  41.714  1.00 24.45       C
ATOM  12725  O   ALA D 362   -3.519  85.611  40.932  1.00 22.67       O
ATOM  12726  CB  ALA D 362   -1.748  84.388  43.390  1.00 23.96       C
ATOM  12727  N   TYR D 363   -2.708  87.217  42.284  1.00 25.58       N
ATOM  12728  CA  TYR D 363   -3.806  88.130  41.993  1.00 26.84       C
ATOM  12729  C   TYR D 363   -3.771  88.527  40.519  1.00 26.41       C
ATOM  12730  O   TYR D 363   -4.762  88.385  39.803  1.00 27.08       O
ATOM  12731  CB  TYR D 363   -3.715  89.391  42.855  1.00 28.03       C
ATOM  12732  CG  TYR D 363   -4.860  90.341  42.602  1.00 28.98       C
ATOM  12733  CD1 TYR D 363   -6.097  90.142  43.213  1.00 30.44       C
ATOM  12734  CD2 TYR D 363   -4.730  91.400  41.702  1.00 28.73       C
ATOM  12735  CE1 TYR D 363   -7.180  90.969  42.934  1.00 30.56       C
ATOM  12736  CE2 TYR D 363   -5.805  92.235  41.412  1.00 30.37       C
ATOM  12737  CZ  TYR D 363   -7.028  92.012  42.030  1.00 32.16       C
ATOM  12738  OH  TYR D 363   -8.107  92.813  41.733  1.00 33.22       O
ATOM  12739  N   GLY D 364   -2.627  89.032  40.071  1.00 26.55       N
ATOM  12740  CA  GLY D 364   -2.501  89.426  38.680  1.00 25.96       C
ATOM  12741  C   GLY D 364   -2.780  88.249  37.762  1.00 26.59       C
ATOM  12742  O   GLY D 364   -3.464  88.385  36.745  1.00 25.10       O
ATOM  12743  N   TYR D 365   -2.253  87.086  38.139  1.00 25.15       N
ATOM  12744  CA  TYR D 365   -2.417  85.852  37.374  1.00 25.52       C
ATOM  12745  C   TYR D 365   -3.890  85.483  37.241  1.00 25.19       C
ATOM  12746  O   TYR D 365   -4.342  85.043  36.184  1.00 25.70       O
ATOM  12747  CB  TYR D 365   -1.667  84.717  38.077  1.00 26.26       C
ATOM  12748  CG  TYR D 365   -1.699  83.376  37.376  1.00 25.81       C
ATOM  12749  CD1 TYR D 365   -1.070  83.196  36.142  1.00 26.48       C
ATOM  12750  CD2 TYR D 365   -2.293  82.267  37.981  1.00 24.68       C
ATOM  12751  CE1 TYR D 365   -1.023  81.941  35.530  1.00 24.52       C
ATOM  12752  CE2 TYR D 365   -2.250  81.010  37.381  1.00 23.74       C
ATOM  12753  CZ  TYR D 365   -1.610  80.855  36.156  1.00 25.35       C
ATOM  12754  OH  TYR D 365   -1.527  79.612  35.574  1.00 25.85       O
ATOM  12755  N   ALA D 366   -4.632  85.649  38.327  1.00 25.86       N
ATOM  12756  CA  ALA D 366   -6.053  85.335  38.327  1.00 26.70       C
ATOM  12757  C   ALA D 366   -6.767  86.252  37.343  1.00 28.00       C
ATOM  12758  O   ALA D 366   -7.762  85.864  36.740  1.00 28.30       O
ATOM  12759  CB  ALA D 366   -6.631  85.520  39.728  1.00 25.18       C
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ATOM   12760  N    GLN D 367      -6.242  87.464  37.176  1.00 29.21           N
ATOM   12761  CA   GLN D 367      -6.850  88.436  36.277  1.00 31.51           C
ATOM   12762  C    GLN D 367      -6.353  88.364  34.835  1.00 31.35           C
ATOM   12763  O    GLN D 367      -7.156  88.298  33.908  1.00 32.08           O
ATOM   12764  CB   GLN D 367      -6.629  89.867  36.797  1.00 34.09           C
ATOM   12765  CG   GLN D 367      -6.879  90.074  38.291  1.00 36.49           C
ATOM   12766  CD   GLN D 367      -8.245  89.585  38.746  1.00 38.98           C
ATOM   12767  OE1  GLN D 367      -9.275  89.978  38.201  1.00 40.91           O
ATOM   12768  NE2  GLN D 367      -8.256  88.727  39.761  1.00 41.12           N
ATOM   12769  N    ASN D 368      -5.036  88.367  34.647  1.00 30.78           N
ATOM   12770  CA   ASN D 368      -4.464  88.369  33.304  1.00 30.41           C
ATOM   12771  C    ASN D 368      -3.554  87.188  32.944  1.00 30.03           C
ATOM   12772  O    ASN D 368      -2.750  87.280  32.013  1.00 28.89           O
ATOM   12773  CB   ASN D 368      -3.690  89.671  33.112  1.00 32.44           C
ATOM   12774  CG   ASN D 368      -4.447  90.883  33.639  1.00 35.33           C
ATOM   12775  OD1  ASN D 368      -3.915  91.654  34.444  1.00 37.11           O
ATOM   12776  ND2  ASN D 368      -5.692  91.058  33.187  1.00 33.82           N
ATOM   12777  N    GLN D 369      -3.685  86.083  33.668  1.00 27.30           N
ATOM   12778  CA   GLN D 369      -2.864  84.899  33.423  1.00 27.18           C
ATOM   12779  C    GLN D 369      -1.390  85.185  33.125  1.00 25.27           C
ATOM   12780  O    GLN D 369      -0.714  85.846  33.915  1.00 25.63           O
ATOM   12781  CB   GLN D 369      -3.470  84.052  32.300  1.00 28.08           C
ATOM   12782  CG   GLN D 369      -4.884  83.583  32.603  1.00 30.57           C
ATOM   12783  CD   GLN D 369      -5.937  84.594  32.191  1.00 32.71           C
ATOM   12784  OE1  GLN D 369      -7.012  84.676  32.793  1.00 33.16           O
ATOM   12785  NE2  GLN D 369      -5.641  85.360  31.147  1.00 34.13           N
ATOM   12786  N    MET D 370      -0.895  84.704  31.987  1.00 23.79           N
ATOM   12787  CA   MET D 370       0.517  84.878  31.636  1.00 23.97           C
ATOM   12788  C    MET D 370       1.110  86.286  31.714  1.00 24.67           C
ATOM   12789  O    MET D 370       2.284  86.438  32.063  1.00 24.66           O
ATOM   12790  CB   MET D 370       0.800  84.278  30.256  1.00 23.70           C
ATOM   12791  CG   MET D 370       0.604  82.765  30.189  1.00 24.41           C
ATOM   12792  SD   MET D 370       1.300  81.864  31.625  1.00 23.35           S
ATOM   12793  CE   MET D 370       3.047  82.194  31.446  1.00 21.42           C
ATOM   12794  N    SER D 371       0.326  87.313  31.398  1.00 25.11           N
ATOM   12795  CA   SER D 371       0.844  88.683  31.464  1.00 27.62           C
ATOM   12796  C    SER D 371       1.437  88.976  32.842  1.00 28.06           C
ATOM   12797  O    SER D 371       2.511  89.568  32.956  1.00 28.66           O
ATOM   12798  CB   SER D 371      -0.266  89.699  31.166  1.00 28.42           C
ATOM   12799  OG   SER D 371      -0.673  89.633  29.808  1.00 32.44           O
ATOM   12800  N    ALA D 372       0.730  88.549  33.883  1.00 27.84           N
ATOM   12801  CA   ALA D 372       1.167  88.768  35.252  1.00 28.08           C
ATOM   12802· C    ALA D 372       2.502  88.101  35.560  1.00 27.69           C
ATOM   12803  O    ALA D 372       3.323  88.657  36.290  1.00 28.39           O
ATOM   12804  CB   ALA D 372       0.095  88.275  36.230  1.00 26.88           C
ATOM   12805  N    TYR D 373       2.733  86.913  35.011  1.00 27.67           N
ATOM   12806  CA   TYR D 373       3.993  86.236  35.287  1.00 27.62           C
ATOM   12807  C    TYR D 373       5.151  86.832  34.502  1.00 26.43           C
ATOM   12808  O    TYR D 373       6.249  86.985  35.028  1.00 27.59           O
ATOM   12809  CB   TYR D 373       3.909  84.743  34.981  1.00 26.30           C
ATOM   12810  CG   TYR D 373       5.165  84.030  35.411  1.00 25.71           C
ATOM   12811  CD1  TYR D 373       5.410  83.769  36.759  1.00 25.09           C
ATOM   12812  CD2  TYR D 373       6.149  83.693  34.485  1.00 24.76           C
ATOM   12813  CE1  TYR D 373'      6.604  83.194  37.173  1.00 25.03           C
ATOM   12814  CE2  TYR D 373       7.350  83.122  34.888  1.00 25.61           C
ATOM   12815  CZ   TYR D 373       7.572  82.877  36.232  1.00 25.77           C
ATOM   12816  OH   TYR D 373       8.768  82.333  36.634  1.00 27.73           O
ATOM   12817  N    VAL D 374       4.903  87.161  33.240  1.00 27.58           N
ATOM   12818  CA   VAL D 374       5.932  87.743  32.388  1.00 26.53           C
ATOM   12819  C    VAL D 374       6.483  89.000  33.046  1.00 27.29           C
ATOM   12820  O    VAL D 374       7.668  89.305  32.922  1.00 26.65           O
ATOM   12821  CB   VAL D 374       5.368  88.093  30.995  1.00 26.69           C
ATOM   12822  CG1  VAL D 374       6.458  88.704  30.119  1.00 25.68           C
ATOM   12823  CG2  VAL D 374       4.806  86.841  30.351  1.00 25.54           C
ATOM   12824  N    GLU D 375       5.623  89.730  33.750  1.00 27.84           N
ATOM   12825  CA   GLU D 375       6.069  90.938  34.438  1.00 29.74           C
ATOM   12826  C    GLU D 375       7.132  90.585  35.472  1.00 28.42           C
ATOM   12827  O    GLU D 375       8.127  91.292  35.617  1.00 26.93           O
ATOM   12828  CB   GLU D 375       4.902  91.629  35.134  1.00 31.15           C
ATOM   12829  CG   GLU D 375       4.060  92.472  34.209  1.00 38.02           C
ATOM   12830  CD   GLU D 375       2.947  93.187  34.941  1.00 41.72           C
ATOM   12831  OE1  GLU D 375       3.213  93.714  36.045  1.00 45.60           O
ATOM   12832  OE2  GLU D 375       1.815  93.229  34.411  1.00 43.01           O
ATOM   12833  N    LEU D 376       6.918  89.487  36.190  1.00 26.77           N
ATOM   12834  CA   LEU D 376       7.879  89.063  37.196  1.00 25.36           C
ATOM   12835  C    LEU D 376       9.183  88.616  36.537  1.00 24.19           C
ATOM   12836  O    LEU D 376      10.263  88.997  36.974  1.00 23.95           O
ATOM   12837  CB   LEU D 376       7.296  87.922  38.036  1.00 25.36           C
ATOM   12838  CG   LEU D 376       8.250  87.190  38.984  1.00 23.54           C
ATOM   12839  CD1  LEU D 376       8.924  88.180  39.923  1.00 23.53           C
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| ATOM | 12840 | CD2 | LEU | D | 376 | 7.463 | 86.145 | 39.766 | 1.00 | 24.88 | C |
|------|-------|-----|-----|---|-----|-------|--------|--------|------|-------|---|
| ATOM | 12841 | N   | GLN | D | 377 | 9.080 | 87.813 | 35.483 | 1.00 | 23.93 | N |
| ATOM | 12842 | CA  | GLN | D | 377 | 10.271 | 87.331 | 34.794 | 1.00 | 25.48 | C |
| ATOM | 12843 | C   | GLN | D | 377 | 11.101 | 88.497 | 34.262 | 1.00 | 26.57 | C |
| ATOM | 12844 | O   | GLN | D | 377 | 12.333 | 88.483 | 34.336 | 1.00 | 25.67 | O |
| ATOM | 12845 | CB  | GLN | D | 377 | 9.889 | 86.394 | 33.641 | 1.00 | 24.49 | C |
| ATOM | 12846 | CG  | GLN | D | 377 | 11.099 | 85.865 | 32.883 | 1.00 | 26.39 | C |
| ATOM | 12847 | CD  | GLN | D | 377 | 10.752 | 84.779 | 31.885 | 1.00 | 27.72 | C |
| ATOM | 12848 | OE1 | GLN | D | 377 | 11.283 | 83.667 | 31.955 | 1.00 | 28.37 | O |
| ATOM | 12849 | NE2 | GLN | D | 377 | 9.863 | 85.093 | 30.947 | 1.00 | 28.03 | N |
| ATOM | 12850 | N   | GLU | D | 378 | 10.422 | 89.504 | 33.721 | 1.00 | 26.55 | N |
| ATOM | 12851 | CA  | GLU | D | 378 | 11.112 | 90.677 | 33.196 | 1.00 | 28.24 | C |
| ATOM | 12852 | C   | GLU | D | 378 | 11.827 | 91.421 | 34.327 | 1.00 | 28.06 | C |
| ATOM | 12853 | O   | GLU | D | 378 | 12.952 | 91.891 | 34.155 | 1.00 | 28.51 | O |
| ATOM | 12854 | CB  | GLU | D | 378 | 10.122 | 91.604 | 32.480 | 1.00 | 28.22 | C |
| ATOM | 12855 | CG  | GLU | D | 378 | 9.684 | 91.088 | 31.119 | 1.00 | 28.52 | C |
| ATOM | 12856 | CD  | GLU | D | 378 | 10.854 | 90.912 | 30.172 | 1.00 | 30.92 | C |
| ATOM | 12857 | OE1 | GLU | D | 378 | 11.625 | 91.880 | 30.013 | 1.00 | 33.95 | O |
| ATOM | 12858 | OE2 | GLU | D | 378 | 11.005 | 89.820 | 29.585 | 1.00 | 29.09 | O |
| ATOM | 12859 | N   | ARG | D | 379 | 11.182 | 91.531 | 35.485 | 1.00 | 27.05 | N |
| ATOM | 12860 | CA  | ARG | D | 379 | 11.828 | 92.196 | 36.608 | 1.00 | 27.45 | C |
| ATOM | 12861 | C   | ARG | D | 379 | 13.068 | 91.399 | 37.000 | 1.00 | 27.90 | C |
| ATOM | 12862 | O   | ARG | D | 379 | 14.104 | 91.972 | 37.334 | 1.00 | 28.40 | O |
| ATOM | 12863 | CB  | ARG | D | 379 | 10.880 | 92.306 | 37.800 | 1.00 | 29.26 | C |
| ATOM | 12864 | CG  | ARG | D | 379 | 9.804 | 93.359 | 37.629 | 1.00 | 31.76 | C |
| ATOM | 12865 | CD  | ARG | D | 379 | 9.291 | 93.821 | 38.980 | 1.00 | 33.06 | C |
| ATOM | 12866 | NE  | ARG | D | 379 | 8.534 | 92.781 | 39.660 | 1.00 | 36.66 | N |
| ATOM | 12867 | CZ  | ARG | D | 379 | 7.312 | 92.398 | 39.304 | 1.00 | 38.95 | C |
| ATOM | 12868 | NH1 | ARG | D | 379 | 6.709 | 92.976 | 38.271 | 1.00 | 41.53 | N |
| ATOM | 12869 | NH2 | ARG | D | 379 | 6.695 | 91.436 | 39.976 | 1.00 | 38.98 | N |
| ATOM | 12870 | N   | GLU | D | 380 | 12.959 | 90.072 | 36.949 | 1.00 | 27.99 | N |
| ATOM | 12871 | CA  | GLU | D | 380 | 14.084 | 89.206 | 37.286 | 1.00 | 27.44 | C |
| ATOM | 12872 | C   | GLU | D | 380 | 15.241 | 89.440 | 36.323 | 1.00 | 26.44 | C |
| ATOM | 12873 | O   | GLU | D | 380 | 16.395 | 89.532 | 36.740 | 1.00 | 25.27 | O |
| ATOM | 12874 | CB  | GLU | D | 380 | 13.658 | 87.740 | 37.246 | 1.00 | 27.13 | C |
| ATOM | 12875 | CG  | GLU | D | 380 | 12.890 | 87.299 | 38.466 | 1.00 | 26.77 | C |
| ATOM | 12876 | CD  | GLU | D | 380 | 12.486 | 85.847 | 38.387 | 1.00 | 27.08 | C |
| ATOM | 12877 | OE1 | GLU | D | 380 | 11.506 | 85.547 | 37.673 | 1.00 | 27.57 | O |
| ATOM | 12878 | OE2 | GLU | D | 380 | 13.154 | 85.010 | 39.029 | 1.00 | 24.31 | O |
| ATOM | 12879 | N   | PHE | D | 381 | 14.935 | 89.524 | 35.032 | 1.00 | 27.62 | N |
| ATOM | 12880 | CA  | PHE | D | 381 | 15.975 | 89.782 | 34.034 | 1.00 | 29.00 | C |
| ATOM | 12881 | C   | PHE | D | 381 | 16.639 | 91.120 | 34.354 | 1.00 | 28.25 | C |
| ATOM | 12882 | O   | PHE | D | 381 | 17.859 | 91.241 | 34.340 | 1.00 | 27.71 | O |
| ATOM | 12883 | CB  | PHE | D | 381 | 15.387 | 89.847 | 32.618 | 1.00 | 28.04 | C |
| ATOM | 12884 | CG  | PHE | D | 381 | 15.110 | 88.504 | 32.007 | 1.00 | 28.65 | C |
| ATOM | 12885 | CD1 | PHE | D | 381 | 16.082 | 87.506 | 32.007 | 1.00 | 29.94 | C |
| ATOM | 12886 | CD2 | PHE | D | 381 | 13.891 | 88.249 | 31.391 | 1.00 | 29.53 | C |
| ATOM | 12887 | CE1 | PHE | D | 381 | 15.843 | 86.270 | 31.398 | 1.00 | 30.33 | C |
| ATOM | 12888 | CE2 | PHE | D | 381 | 13.639 | 87.015 | 30.776 | 1.00 | 30.70 | C |
| ATOM | 12889 | CZ  | PHE | D | 381 | 14.618 | 86.024 | 30.781 | 1.00 | 30.48 | C |
| ATOM | 12890 | N   | ALA | D | 382 | 15.820 | 92.121 | 34.656 | 1.00 | 28.08 | N |
| ATOM | 12891 | CA  | ALA | D | 382 | 16.335 | 93.446 | 34.970 | 1.00 | 29.52 | C |
| ATOM | 12892 | C   | ALA | D | 382 | 17.237 | 93.421 | 36.196 | 1.00 | 30.65 | C |
| ATOM | 12893 | O   | ALA | D | 382 | 18.286 | 94.062 | 36.212 | 1.00 | 32.20 | O |
| ATOM | 12894 | CB  | ALA | D | 382 | 15.184 | 94.415 | 35.189 | 1.00 | 27.94 | C |
| ATOM | 12895 | N   | ALA | D | 383 | 16.828 | 92.672 | 37.217 | 1.00 | 30.76 | N |
| ATOM | 12896 | CA  | ALA | D | 383 | 17.595 | 92.577 | 38.453 | 1.00 | 30.16 | C |
| ATOM | 12897 | C   | ALA | D | 383 | 18.968 | 91.930 | 38.279 | 1.00 | 31.29 | C |
| ATOM | 12898 | O   | ALA | D | 383 | 19.809 | 92.007 | 39.179 | 1.00 | 31.87 | O |
| ATOM | 12899 | CB  | ALA | D | 383 | 16.792 | 91.819 | 39.501 | 1.00 | 29.77 | C |
| ATOM | 12900 | N   | GLU | D | 384 | 19.202 | 91.300 | 37.130 | 1.00 | 32.01 | N |
| ATOM | 12901 | CA  | GLU | D | 384 | 20.482 | 90.643 | 36.880 | 1.00 | 34.24 | C |
| ATOM | 12902 | C   | GLU | D | 384 | 21.654 | 91.620 | 36.897 | 1.00 | 35.15 | C |
| ATOM | 12903 | O   | GLU | D | 384 | 22.789 | 91.231 | 37.167 | 1.00 | 34.46 | O |
| ATOM | 12904 | CB  | GLU | D | 384 | 20.464 | 89.902 | 35.540 | 1.00 | 34.48 | C |
| ATOM | 12905 | CG  | GLU | D | 384 | 19.443 | 88.774 | 35.452 | 1.00 | 40.17 | C |
| ATOM | 12906 | CD  | GLU | D | 384 | 19.591 | 87.939 | 34.182 | 1.00 | 40.63 | C |
| ATOM | 12907 | OE1 | GLU | D | 384 | 19.903 | 88.517 | 33.119 | 1.00 | 43.23 | O |
| ATOM | 12908 | OE2 | GLU | D | 384 | 19.381 | 86.709 | 34.243 | 1.00 | 40.91 | O |
| ATOM | 12909 | N   | GLU | D | 385 | 21.387 | 92.886 | 36.600 | 1.00 | 37.21 | N |
| ATOM | 12910 | CA  | GLU | D | 385 | 22.458 | 93.875 | 36.604 | 1.00 | 39.62 | C |
| ATOM | 12911 | C   | GLU | D | 385 | 22.825 | 94.238 | 38.039 | 1.00 | 38.03 | C |
| ATOM | 12912 | O   | GLU | D | 385 | 23.854 | 94.862 | 38.288 | 1.00 | 38.68 | O |
| ATOM | 12913 | CB  | GLU | D | 385 | 22.044 | 95.124 | 35.819 | 1.00 | 42.14 | C |
| ATOM | 12914 | CG  | GLU | D | 385 | 20.811 | 95.820 | 36.347 | 1.00 | 47.68 | C |
| ATOM | 12915 | CD  | GLU | D | 385 | 20.385 | 96.986 | 35.469 | 1.00 | 52.40 | C |
| ATOM | 12916 | OE1 | GLU | D | 385 | 21.197 | 97.924 | 35.286 | 1.00 | 52.77 | O |
| ATOM | 12917 | OE2 | GLU | D | 385 | 19.238 | 96.962 | 34.961 | 1.00 | 53.86 | O |
| ATOM | 12918 | N   | ARG | D | 386 | 21.980 | 93.834 | 38.982 | 1.00 | 37.21 | N |
| ATOM | 12919 | CA  | ARG | D | 386 | 22.239 | 94.093 | 40.393 | 1.00 | 36.63 | C |

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ATOM  12920  C    ARG D 386    22.929  92.882  41.027  1.00 35.77       C
ATOM  12921  O    ARG D 386    23.358  92.933  42.181  1.00 37.07       O
ATOM  12922  CB   ARG D 386    20.933  94.393  41.140  1.00 37.84       C
ATOM  12923  CG   ARG D 386    20.371  95.791  40.903  1.00 38.51       C
ATOM  12924  CD   ARG D 386    19.190  96.069  41.833  1.00 39.46       C
ATOM  12925  NE   ARG D 386    17.998  95.314  41.455  1.00 40.69       N
ATOM  12926  CZ   ARG D 386    16.962  95.098  42.260  1.00 41.57       C
ATOM  12927  NH1  ARG D 386    16.967  95.575  43.498  1.00 42.98       N
ATOM  12928  NH2  ARG D 386    15.915  94.412  41.825  1.00 41.81       N
ATOM  12929  N    GLY D 387    23.028  91.792  40.271  1.00 34.13       N
ATOM  12930  CA   GLY D 387    23.668  90.592  40.784  1.00 32.05       C
ATOM  12931  C    GLY D 387    22.763  89.373  40.833  1.00 31.00       C
ATOM  12932  O    GLY D 387    23.237  88.249  41.011  1.00 31.59       O
ATOM  12933  N    TYR D 388    21.460  89.589  40.677  1.00 30.64       N
ATOM  12934  CA   TYR D 388    20.482  88.500  40.708  1.00 30.08       C
ATOM  12935  C    TYR D 388    20.871  87.425  39.701  1.00 29.72       C
ATOM  12936  O    TYR D 388    21.273  87.738  38.581  1.00 30.70       O
ATOM  12937  CB   TYR D 388    19.090  89.035  40.377  1.00 27.93       C
ATOM  12938  CG   TYR D 388    17.964  88.055  40.627  1.00 28.24       C
ATOM  12939  CD1  TYR D 388    17.675  87.605  41.916  1.00 26.44       C
ATOM  12940  CD2  TYR D 388    17.166  87.602  39.579  1.00 27.66       C
ATOM  12941  CE1  TYR D 388    16.619  86.732  42.155  1.00 26.27       C
ATOM  12942  CE2  TYR D 388    16.107  86.731  39.808  1.00 28.11       C
ATOM  12943  CZ   TYR D 388    15.839  86.300  41.097  1.00 26.46       C
ATOM  12944  OH   TYR D 388    14.792  85.435  41.319  1.00 25.81       O
ATOM  12945  N    THR D 389    20.740  86.163  40.097  1.00 28.89       N
ATOM  12946  CA   THR D 389    21.104  85.046  39.226  1.00 27.21       C
ATOM  12947  C    THR D 389    20.057  83.932  39.147  1.00 25.62       C
ATOM  12948  O    THR D 389    20.168  83.028  38.317  1.00 27.84       O
ATOM  12949  CB   THR D 389    22.426  84.408  39.693  1.00 27.04       C
ATOM  12950  OG1  THR D 389    22.261  83.900  41.024  1.00 26.27       O
ATOM  12951  CG2  THR D 389    23.550  85.438  39.687  1.00 25.59       C
ATOM  12952  N    ALA D 390    19.044  83.995  40.002  1.00 24.67       N
ATOM  12953  CA   ALA D 390    18.009  82.964  40.029  1.00 24.35       C
ATOM  12954  C    ALA D 390    17.144  82.879  38.768  1.00 25.19       C
ATOM  12955  O    ALA D 390    16.334  81.961  38.635  1.00 24.01       O
ATOM  12956  CB   ALA D 390    17.131  83.155  41.246  1.00 21.13       C
ATOM  12957  N    THR D 391    17.307  83.830  37.849  1.00 26.73       N
ATOM  12958  CA   THR D 391    16.538  83.826  36.605  1.00 26.43       C
ATOM  12959  C    THR D 391    16.813  82.507  35.887  1.00 27.01       C
ATOM  12960  O    THR D 391    15.919  81.900  35.294  1.00 28.51       O
ATOM  12961  CB   THR D 391    16.953  84.987  35.673  1.00 28.38       C
ATOM  12962  OG1  THR D 391    16.858  86.235  36.373  1.00 26.21       O
ATOM  12963  CG2  THR D 391    16.038  85.035  34.464  1.00 29.53       C
ATOM  12964  N    LYS D 392    18.067  82.078  35.937  1.00 26.20       N
ATOM  12965  CA   LYS D 392    18.476  80.825  35.327  1.00 26.57       C
ATOM  12966  C    LYS D 392    18.376  79.802  36.452  1.00 25.48       C
ATOM  12967  O    LYS D 392    19.380  79.390  37.031  1.00 25.20       O
ATOM  12968  CB   LYS D 392    19.911  80.944  34.821  1.00 28.58       C
ATOM  12969  CG   LYS D 392    20.152  82.245  34.061  1.00 33.12       C
ATOM  12970  CD   LYS D 392    21.080  82.069  32.872  1.00 37.44       C
ATOM  12971  CE   LYS D 392    22.500  81.732  33.287  1.00 39.95       C
ATOM  12972  NZ   LYS D 392    23.365  81.494  32.094  1.00 41.85       N
ATOM  12973  N    HIS D 393    17.142  79.421  36.763  1.00 24.51       N
ATOM  12974  CA   HIS D 393    16.849  78.487  37.843  1.00 24.39       C
ATOM  12975  C    HIS D 393    17.579  77.144  37.851  1.00 23.38       C
ATOM  12976  O    HIS D 393    17.847  76.605  38.922  1.00 24.31       O
ATOM  12977  CB   HIS D 393    15.334  78.253  37.926  1.00 24.41       C
ATOM  12978  CG   HIS D 393    14.697  77.888  36.618  1.00 27.75       C·
ATOM  12979  ND1  HIS D 393    13.781  78.701  35.982  1.00 27.09       N
ATOM  12980  CD2  HIS D 393    14.816  76.781  35.845  1.00 26.92       C
ATOM  12981  CE1  HIS D 393    13.362  78.110  34.877  1.00 27.28       C
ATOM  12982  NE2  HIS D 393    13.974  76.943  34.771  1.00 26.49       N
ATOM  12983  N    GLN D 394    17.908  76.606  36.680  1.00 22.77       N
ATOM  12984  CA   GLN D 394    18.595  75.320  36.611  1.00 22.96       C
ATOM  12985  C    GLN D 394    19.956  75.356  37.314  1.00 25.03       C
ATOM  12986  O    GLN D 394    20.206  74.570  38.234  1.00 25.51       O
ATOM  12987  CB   GLN D 394    18.771  74.889  35.150  1.00 22.49       C
ATOM  12988  CG   GLN D 394    17.468  74.861  34.350  1.00 24.18       C
ATOM  12989  CD   GLN D 394    16.498  73.770  34.803  1.00 25.02       C
ATOM  12990  OE1  GLN D 394    16.506  73.343  35.960  1.00 22.79       O
ATOM  12991  NE2  GLN D 394    15.641  73.332  33.887  1.00 26.19       N
ATOM  12992  N    ARG D 395    20.834  76.263  36.888  1.00 23.35       N
ATOM  12993  CA   ARG D 395    22.156  76.377  37.495  1.00 22.43       C
ATOM  12994  C    ARG D 395    22.055  76.885  38.932  1.00 21.87       C
ATOM  12995  O    ARG D 395    22.861  76.529  39.789  1.00 22.16       O
ATOM  12996  CB   ARG D 395    23.044  77.323  36.676  1.00 24.24       C
ATOM  12997  CG   ARG D 395    22.414  78.683  36.389  1.00 25.46       C
ATOM  12998  CD   ARG D 395    23.475  79.779  36.346  1.00 25.64       C
ATOM  12999  NE   ARG D 395    24.150  79.914  37.634  1.00 24.96       N
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| ATOM | 13000 | CZ  | ARG D 395 | 23.553 | 80.321 | 38.754 | 1.00 26.05 | C |
| ATOM | 13001 | NH1 | ARG D 395 | 22.262 | 80.640 | 38.749 | 1.00 23.66 | N |
| ATOM | 13002 | NH2 | ARG D 395 | 24.243 | 80.395 | 39.888 | 1.00 23.84 | N |
| ATOM | 13003 | N   | GLU D 396 | 21.055 | 77.717 | 39.193 | 1.00 21.80 | N |
| ATOM | 13004 | CA  | GLU D 396 | 20.858 | 78.267 | 40.528 | 1.00 21.79 | C |
| ATOM | 13005 | C   | GLU D 396 | 20.693 | 77.152 | 41.545 | 1.00 23.27 | C |
| ATOM | 13006 | O   | GLU D 396 | 21.159 | 77.249 | 42.682 | 1.00 22.48 | O |
| ATOM | 13007 | CB  | GLU D 396 | 19.601 | 79.129 | 40.559 | 1.00 21.93 | C |
| ATOM | 13008 | CG  | GLU D 396 | 19.355 | 79.847 | 41.875 | 1.00 22.42 | C |
| ATOM | 13009 | CD  | GLU D 396 | 20.343 | 80.975 | 42.119 | 1.00 24.42 | C |
| ATOM | 13010 | OE1 | GLU D 396 | 20.949 | 81.456 | 41.137 | 1.00 23.83 | O |
| ATOM | 13011 | OE2 | GLU D 396 | 20.501 | 81.390 | 43.285 | 1.00 24.18 | O |
| ATOM | 13012 | N   | VAL D 397 | 20.024 | 76.086 | 41.123 | 1.00 21.73 | N |
| ATOM | 13013 | CA  | VAL D 397 | 19.749 | 74.972 | 42.011 | 1.00 21.94 | C |
| ATOM | 13014 | C   | VAL D 397 | 20.769 | 73.833 | 41.885 | 1.00 21.89 | C |
| ATOM | 13015 | O   | VAL D 397 | 20.558 | 72.734 | 42.403 | 1.00 22.22 | O |
| ATOM | 13016 | CB  | VAL D 397 | 18.298 | 74.481 | 41.775 | 1.00 20.51 | C |
| ATOM | 13017 | CG1 | VAL D 397 | 18.205 | 73.725 | 40.473 | 1.00 20.04 | C |
| ATOM | 13018 | CG2 | VAL D 397 | 17.831 | 73.661 | 42.930 | 1.00 26.32 | C |
| ATOM | 13019 | N   | GLY D 398 | 21.871 | 74.101 | 41.183 | 1.00 21.56 | N |
| ATOM | 13020 | CA  | GLY D 398 | 22.927 | 73.112 | 41.049 | 1.00 19.56 | C |
| ATOM | 13021 | C   | GLY D 398 | 22.957 | 72.130 | 39.891 | 1.00 20.96 | C |
| ATOM | 13022 | O   | GLY D 398 | 23.711 | 71.155 | 39.954 | 1.00 19.82 | O |
| ATOM | 13023 | N   | ALA D 399 | 22.168 | 72.363 | 38.842 | 1.00 20.64 | N |
| ATOM | 13024 | CA  | ALA D 399 | 22.159 | 71.461 | 37.687 | 1.00 20.41 | C |
| ATOM | 13025 | C   | ALA D 399 | 23.569 | 71.331 | 37.128 | 1.00 20.35 | C |
| ATOM | 13026 | O   | ALA D 399 | 23.992 | 70.248 | 36.731 | 1.00 21.32 | O |
| ATOM | 13027 | CB  | ALA D 399 | 21.212 | 71.986 | 36.597 | 1.00 18.63 | C |
| ATOM | 13028 | N   | GLY D 400 | 24.291 | 72.445 | 37.099 | 1.00 21.38 | N |
| ATOM | 13029 | CA  | GLY D 400 | 25.649 | 72.429 | 36.590 | 1.00 21.23 | C |
| ATOM | 13030 | C   | GLY D 400 | 26.597 | 71.728 | 37.543 | 1.00 22.29 | C |
| ATOM | 13031 | O   | GLY D 400 | 27.591 | 71.131 | 37.117 | 1.00 22.78 | O |
| ATOM | 13032 | N   | TYR D 401 | 26.295 | 71.793 | 38.837 | 1.00 22.60 | N |
| ATOM | 13033 | CA  | TYR D 401 | 27.138 | 71.149 | 39.837 | 1.00 22.48 | C |
| ATOM | 13034 | C   | TYR D 401 | 27.035 | 69.629 | 39.730 | 1.00 22.35 | C |
| ATOM | 13035 | O   | TYR D 401 | 28.044 | 68.919 | 39.771 | 1.00 23.74 | O |
| ATOM | 13036 | CB  | TYR D 401 | 26.737 | 71.585 | 41.248 | 1.00 21.27 | C |
| ATOM | 13037 | CG  | TYR D 401 | 27.595 | 70.960 | 42.323 | 1.00 20.82 | C |
| ATOM | 13038 | CD1 | TYR D 401 | 28.929 | 71.347 | 42.493 | 1.00 18.59 | C |
| ATOM | 13039 | CD2 | TYR D 401 | 27.087 | 69.956 | 43.150 | 1.00 19.99 | C |
| ATOM | 13040 | CE1 | TYR D 401 | 29.738 | 70.748 | 43.459 | 1.00 18.73 | C |
| ATOM | 13041 | CE2 | TYR D 401 | 27.886 | 69.347 | 44.122 | 1.00 21.53 | C |
| ATOM | 13042 | CZ  | TYR D 401 | 29.212 | 69.747 | 44.268 | 1.00 20.08 | C |
| ATOM | 13043 | OH  | TYR D 401 | 30.007 | 69.131 | 45.203 | 1.00 18.61 | O |
| ATOM | 13044 | N   | PHE D 402 | 25.819 | 69.122 | 39.589 | 1.00 21.23 | N |
| ATOM | 13045 | CA  | PHE D 402 | 25.658 | 67.681 | 39.482 | 1.00 20.85 | C |
| ATOM | 13046 | C   | PHE D 402 | 26.124 | 67.142 | 38.131 | 1.00 20.14 | C |
| ATOM | 13047 | O   | PHE D 402 | 26.488 | 65.965 | 38.017 | 1.00 19.53 | O |
| ATOM | 13048 | CB  | PHE D 402 | 24.216 | 67.282 | 39.803 | 1.00 20.41 | C |
| ATOM | 13049 | CG  | PHE D 402 | 23.927 | 67.264 | 41.284 | 1.00 20.09 | C |
| ATOM | 13050 | CD1 | PHE D 402 | 23.615 | 68.437 | 41.962 | 1.00 17.93 | C |
| ATOM | 13051 | CD2 | PHE D 402 | 24.068 | 66.082 | 42.018 | 1.00 19.34 | C |
| ATOM | 13052 | CE1 | PHE D 402 | 23.455 | 68.437 | 43.349 | 1.00 18.66 | C |
| ATOM | 13053 | CE2 | PHE D 402 | 23.911 | 66.072 | 43.402 | 1.00 17.85 | C |
| ATOM | 13054 | CZ  | PHE D 402 | 23.606 | 67.251 | 44.069 | 1.00 17.10 | C |
| ATOM | 13055 | N   | ASP D 403 | 26.133 | 68.004 | 37.116 | 1.00 19.58 | N |
| ATOM | 13056 | CA  | ASP D 403 | 26.623 | 67.600 | 35.804 | 1.00 22.47 | C |
| ATOM | 13057 | C   | ASP D 403 | 28.115 | 67.351 | 35.979 | 1.00 21.98 | C |
| ATOM | 13058 | O   | ASP D 403 | 28.681 | 66.430 | 35.390 | 1.00 22.36 | O |
| ATOM | 13059 | CB  | ASP D 403 | 26.412 | 68.702 | 34.757 | 1.00 23.48 | C |
| ATOM | 13060 | CG  | ASP D 403 | 25.101 | 68.548 | 33.999 | 1.00 26.83 | C |
| ATOM | 13061 | OD1 | ASP D 403 | 24.440 | 67.497 | 34.150 | 1.00 25.09 | O |
| ATOM | 13062 | OD2 | ASP D 403 | 24.741 | 69.477 | 33.240 | 1.00 28.58 | O |
| ATOM | 13063 | N   | ARG D 404 | 28.742 | 68.180 | 36.808 | 1.00 23.44 | N |
| ATOM | 13064 | CA  | ARG D 404 | 30.168 | 68.054 | 37.084 | 1.00 24.24 | C |
| ATOM | 13065 | C   | ARG D 404 | 30.426 | 66.706 | 37.763 | 1.00 23.43 | C |
| ATOM | 13066 | O   | ARG D 404 | 31.336 | 65.971 | 37.383 | 1.00 23.30 | O |
| ATOM | 13067 | CB  | ARG D 404 | 30.626 | 69.215 | 37.976 | 1.00 27.50 | C |
| ATOM | 13068 | CG  | ARG D 404 | 32.132 | 69.291 | 38.190 | 1.00 32.11 | C |
| ATOM | 13069 | CD  | ARG D 404 | 32.881 | 69.187 | 36.869 | 1.00 36.45 | C |
| ATOM | 13070 | NE  | ARG D 404 | 34.323 | 69.295 | 37.049 | 1.00 40.57 | N |
| ATOM | 13071 | CZ  | ARG D 404 | 34.965 | 70.439 | 37.258 | 1.00 42.43 | C |
| ATOM | 13072 | NH1 | ARG D 404 | 34.294 | 71.584 | 37.311 | 1.00 43.24 | N |
| ATOM | 13073 | NH2 | ARG D 404 | 36.281 | 70.435 | 37.416 | 1.00 44.27 | N |
| ATOM | 13074 | N   | ILE D 405 | 29.607 | 66.377 | 38.758 | 1.00 21.88 | N |
| ATOM | 13075 | CA  | ILE D 405 | 29.741 | 65.107 | 39.460 | 1.00 20.55 | C |
| ATOM | 13076 | C   | ILE D 405 | 29.576 | 63.957 | 38.460 | 1.00 21.82 | C |
| ATOM | 13077 | O   | ILE D 405 | 30.391 | 63.037 | 38.419 | 1.00 20.94 | O |
| ATOM | 13078 | CB  | ILE D 405 | 28.663 | 64.955 | 40.575 | 1.00 20.48 | C |
| ATOM | 13079 | CG1 | ILE D 405 | 28.881 | 66.008 | 41.669 | 1.00 19.56 | C |

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ATOM  13080  CG2 ILE D 405      28.712  63.542  41.164  1.00 19.50           C
ATOM  13081  CD1 ILE D 405      27.860  65.964  42.803  1.00 18.35           C
ATOM  13082  N   ALA D 406      28.522  64.017  37.649  1.00 22.33           N
ATOM  13083  CA  ALA D 406      28.265  62.963  36.666  1.00 22.45           C
ATOM  13084  C   ALA D 406      29.433  62.768  35.696  1.00 21.50           C
ATOM  13085  O   ALA D 406      29.862  61.639  35.458  1.00 21.24           O
ATOM  13086  CB  ALA D 406      26.973  63.266  35.886  1.00 20.62           C
ATOM  13087  N   THR D 407      29.950  63.858  35.135  1.00 22.67           N
ATOM  13088  CA  THR D 407      31.072  63.741  34.199  1.00 23.32           C
ATOM  13089  C   THR D 407      32.355  63.317  34.906  1.00 22.63           C
ATOM  13090  O   THR D 407      33.290  62.848  34.268  1.00 24.38           O
ATOM  13091  CB  THR D 407      31.329  65.058  33.430  1.00 21.95           C
ATOM  13092  OG1 THR D 407      31.534  66.126  34.357  1.00 25.93           O
ATOM  13093  CG2 THR D 407      30.148  65.391  32.532  1.00 21.20           C
ATOM  13094  N   THR D 408      32.403  63.480  36.224  1.00 23.79           N
ATOM  13095  CA  THR D 408      33.579  63.066  36.989  1.00 23.28           C
ATOM  13096  C   THR D 408      33.522  61.552  37.152  1.00 25.26           C
ATOM  13097  O   THR D 408      34.543  60.867  37.072  1.00 26.88           O
ATOM  13098  CB  THR D 408      33.605  63.715  38.386  1.00 22.36           C
ATOM  13099  OG1 THR D 408      33.734  65.132  38.247  1.00 23.87           O
ATOM  13100  CG2 THR D 408      34.770  63.186  39.213  1.00 21.75           C
ATOM  13101  N   VAL D 409      32.314  61.040  37.379  1.00 25.42           N
ATOM  13102  CA  VAL D 409      32.088  59.610  37.547  1.00 25.55           C
ATOM  13103  C   VAL D 409      32.210  58.897  36.202  1.00 27.62           C
ATOM  13104  O   VAL D 409      32.665  57.756  36.125  1.00 28.27           O
ATOM  13105  CB  VAL D 409      30.678  59.347  38.120  1.00 25.26           C
ATOM  13106  CG1 VAL D 409      30.345  57.856  38.054  1.00 23.32           C
ATOM  13107  CG2 VAL D 409      30.604  59.847  39.550  1.00 24.75           C
ATOM  13108  N   ASP D 410      31.786  59.579  35.147  1.00 29.01           N
ATOM  13109  CA  ASP D 410      31.834  59.033  33.798  1.00 32.16           C
ATOM  13110  C   ASP D 410      31.836  60.190  32.814  1.00 33.71           C
ATOM  13111  O   ASP D 410      30.792  60.749  32.494  1.00 33.84           O
ATOM  13112  CB  ASP D 410      30.618  58.131  33.547  1.00 34.21           C
ATOM  13113  CG  ASP D 410      30.467  57.731  32.085  1.00 36.06           C
ATOM  13114  OD1 ASP D 410      31.377  58.025  31.277  1.00 36.78           O
ATOM  13115  OD2 ASP D 410      29.430  57.116  31.745  1.00 38.88           O
ATOM  13116  N   PRO D 411      33.023  60.580  32.333  1.00 36.42           N
ATOM  13117  CA  PRO D 411      33.111  61.691  31.376  1.00 37.04           C
ATOM  13118  C   PRO D 411      32.349  61.454  30.068  1.00 37.88           C
ATOM  13119  O   PRO D 411      31.979  62.408  29.380  1.00 37.66           O
ATOM  13120  CB  PRO D 411      34.621  61.851  31.164  1.00 36.10           C
ATOM  13121  CG  PRO D 411      35.172  60.487  31.491  1.00 37.40           C
ATOM  13122  CD  PRO D 411      34.362  60.080  32.692  1.00 36.00           C
ATOM  13123  N   ASN D 412      32.100  60.189  29.738  1.00 38.06           N
ATOM  13124  CA  ASN D 412      31.387  59.855  28.504  1.00 40.12           C
ATOM  13125  C   ASN D 412      29.877  59.679  28.690  1.00 40.13           C
ATOM  13126  O   ASN D 412      29.186  59.196  27.791  1.00 39.75           O
ATOM  13127  CB  ASN D 412      31.985  58.587  27.891  1.00 39.89           C
ATOM  13128  CG  ASN D 412      33.494  58.664  27.769  1.00 40.27           C
ATOM  13129  OD1 ASN D 412      34.032  59.606  27.188  1.00 38.91           O
ATOM  13130  ND2 ASN D 412      34.186  57.672  28.321  1.00 40.55           N
ATOM  13131  N   SER D 413      29.373  60.080  29.853  1.00 40.06           N
ATOM  13132  CA  SER D 413      27.951  59.975  30.155  1.00 39.80           C
ATOM  13133  C   SER D 413      27.094  60.726  29.145  1.00 40.97           C
ATOM  13134  O   SER D 413      27.294  61.922  28.911  1.00 41.40           O
ATOM  13135  CB  SER D 413      27.662  60.528  31.551  1.00 40.13           C
ATOM  13136  OG  SER D 413      26.279  60.805  31.706  1.00 39.54           O
ATOM  13137  N   SER D 414      26.128  60.024  28.558  1.00 40.48           N
ATOM  13138  CA  SER D 414      25.238  60.641  27.584  1.00 40.16           C
ATOM  13139  C   SER D 414      23.946  61.145  28.231  1.00 39.58           C
ATOM  13140  O   SER D 414      22.939  61.326  27.548  1.00 40.74           O
ATOM  13141  CB  SER D 414      24.917  59.652  26.454  1.00 38.80           C
ATOM  13142  OG  SER D 414      24.370  58.444  26.949  1.00 41.21           O
ATOM  13143  N   THR D 415      23.981  61.388  29.543  1.00 38.69           N
ATOM  13144  CA  THR D 415      22.796  61.865  30.248  1.00 37.92           C
ATOM  13145  C   THR D 415      23.003  63.110  31.111  1.00 38.19           C
ATOM  13146  O   THR D 415      22.412  63.226  32.185  1.00 38.80           O
ATOM  13147  CB  THR D 415      22.184  60.752  31.135  1.00 38.53           C
ATOM  13148  OG1 THR D 415      23.167  60.272  32.058  1.00 36.87           O
ATOM  13149  CG2 THR D 415      21.695  59.593  30.279  1.00 38.20           C
ATOM  13150  N   THR D 416      23.831  64.040  30.643  1.00 37.27           N
ATOM  13151  CA  THR D 416      24.077  65.282  31.376  1.00 37.74           C
ATOM  13152  C   THR D 416      22.856  66.191  31.214  1.00 38.20           C
ATOM  13153  O   THR D 416      22.108  66.044  30.248  1.00 37.97           O
ATOM  13154  CB  THR D 416      25.348  65.986  30.863  1.00 37.81           C
ATOM  13155  OG1 THR D 416      25.338  66.020  29.429  1.00 37.20           O
ATOM  13156  CG2 THR D 416      26.587  65.239  31.342  1.00 37.42           C
ATOM  13157  N   ALA D 417      22.667  67.132  32.141  1.00 38.27           N
ATOM  13158  CA  ALA D 417      21.491  68.011  32.138  1.00 38.96           C
ATOM  13159  C   ALA D 417      21.511  69.356  31.401  1.00 40.89           C
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| ATOM | 13160 | O | ALA | D | 417 | 20.621 | 69.631 | 30.588 | 1.00 | 41.49 | O |
| ATOM | 13161 | CB | ALA | D | 417 | 21.042 | 68.244 | 33.582 | 1.00 | 38.14 | C |
| ATOM | 13162 | N | LEU | D | 418 | 22.491 | 70.206 | 31.693 | 1.00 | 41.49 | N |
| ATOM | 13163 | CA | LEU | D | 418 | 22.552 | 71.525 | 31.059 | 1.00 | 41.65 | C |
| ATOM | 13164 | C | LEU | D | 418 | 22.704 | 71.518 | 29.535 | 1.00 | 41.44 | C |
| ATOM | 13165 | O | LEU | D | 418 | 22.202 | 72.419 | 28.857 | 1.00 | 41.72 | O |
| ATOM | 13166 | CB | LEU | D | 418 | 23.664 | 72.369 | 31.700 | 1.00 | 41.16 | C |
| ATOM | 13167 | CG | LEU | D | 418 | 23.429 | 72.772 | 33.165 | 1.00 | 41.43 | C |
| ATOM | 13168 | CD1 | LEU | D | 418 | 24.578 | 73.645 | 33.641 | 1.00 | 40.21 | C |
| ATOM | 13169 | CD2 | LEU | D | 418 | 22.103 | 73.525 | 33.305 | 1.00 | 40.10 | C |
| ATOM | 13170 | N | THR | D | 419 | 23.386 | 70.514 | 28.989 | 1.00 | 41.00 | N |
| ATOM | 13171 | CA | THR | D | 419 | 23.553 | 70.436 | 27.540 | 1.00 | 39.91 | C |
| ATOM | 13172 | C | THR | D | 419 | 22.240 | 70.020 | 26.877 | 1.00 | 39.83 | C |
| ATOM | 13173 | O | THR | D | 419 | 21.737 | 68.912 | 27.089 | 1.00 | 38.77 | O |
| ATOM | 13174 | CB | THR | D | 419 | 24.659 | 69.439 | 27.148 | 1.00 | 39.45 | C |
| ATOM | 13175 | OG1 | THR | D | 419 | 25.918 | 69.917 | 27.636 | 1.00 | 39.11 | O |
| ATOM | 13176 | CG2 | THR | D | 419 | 24.736 | 69.291 | 25.630 | 1.00 | 39.07 | C |
| ATOM | 13177 | N | GLY | D | 420 | 21.690 | 70.928 | 26.077 | 1.00 | 40.19 | N |
| ATOM | 13178 | CA | GLY | D | 420 | 20.438 | 70.660 | 25.396 | 1.00 | 40.14 | C |
| ATOM | 13179 | C | GLY | D | 420 | 19.254 | 71.229 | 26.157 | 1.00 | 40.31 | C |
| ATOM | 13180 | O | GLY | D | 420 | 18.106 | 71.051 | 25.750 | 1.00 | 39.95 | O |
| ATOM | 13181 | N | SER | D | 421 | 19.530 | 71.915 | 27.264 | 1.00 | 39.74 | N |
| ATOM | 13182 | CA | SER | D | 421 | 18.474 | 72.503 | 28.080 | 1.00 | 40.04 | C |
| ATOM | 13183 | C | SER | D | 421 | 17.991 | 73.817 | 27.471 | 1.00 | 40.19 | C |
| ATOM | 13184 | O | SER | D | 421 | 18.732 | 74.476 | 26.744 | 1.00 | 39.33 | O |
| ATOM | 13185 | CB | SER | D | 421 | 18.985 | 72.755 | 29.500 | 1.00 | 39.74 | C |
| ATOM | 13186 | OG | SER | D | 421 | 19.946 | 73.796 | 29.514 | 1.00 | 39.72 | O |
| ATOM | 13187 | N | THR | D | 422 | 16.750 | 74.196 | 27.769 | 1.00 | 40.19 | N |
| ATOM | 13188 | CA | THR | D | 422 | 16.198 | 75.440 | 27.244 | 1.00 | 40.64 | C |
| ATOM | 13189 | C | THR | D | 422 | 16.863 | 76.636 | 27.922 | 1.00 | 41.65 | C |
| ATOM | 13190 | O | THR | D | 422 | 16.892 | 77.735 | 27.366 | 1.00 | 42.06 | O |
| ATOM | 13191 | CB | THR | D | 422 | 14.661 | 75.537 | 27.457 | 1.00 | 40.09 | C |
| ATOM | 13192 | OG1 | THR | D | 422 | 14.362 | 75.543 | 28.860 | 1.00 | 38.18 | O |
| ATOM | 13193 | CG2 | THR | D | 422 | 13.949 | 74.367 | 26.778 | 1.00 | 39.06 | C |
| ATOM | 13194 | N | GLU | D | 423 | 17.390 | 76.425 | 29.127 | 1.00 | 41.75 | N |
| ATOM | 13195 | CA | GLU | D | 423 | 18.059 | 77.503 | 29.850 | 1.00 | 40.99 | C |
| ATOM | 13196 | C | GLU | D | 423 | 19.301 | 77.899 | 29.057 | 1.00 | 42.51 | C |
| ATOM | 13197 | O | GLU | D | 423 | 19.608 | 79.086 | 28.889 | 1.00 | 41.77 | O |
| ATOM | 13198 | CB | GLU | D | 423 | 18.454 | 77.044 | 31.262 | 1.00 | 38.47 | C |
| ATOM | 13199 | CG | GLU | D | 423 | 19.319 | 78.050 | 32.023 | 1.00 | 35.65 | C |
| ATOM | 13200 | CD | GLU | D | 423 | 19.363 | 77.791 | 33.520 | 1.00 | 33.20 | C |
| ATOM | 13201 | OE1 | GLU | D | 423 | 18.324 | 77.981 | 34.189 | 1.00 | 33.06 | O |
| ATOM | 13202 | OE2 | GLU | D | 423 | 20.432 | 77.400 | 34.028 | 1.00 | 30.25 | O |
| ATOM | 13203 | N | GLU | D | 424 | 19.997 | 76.883 | 28.561 | 1.00 | 43.46 | N |
| ATOM | 13204 | CA | GLU | D | 424 | 21.207 | 77.067 | 27.778 | 1.00 | 45.76 | C |
| ATOM | 13205 | C | GLU | D | 424 | 20.929 | 77.778 | 26.450 | 1.00 | 46.90 | C |
| ATOM | 13206 | O | GLU | D | 424 | 21.735 | 78.598 | 25.999 | 1.00 | 47.39 | O |
| ATOM | 13207 | CB | GLU | D | 424 | 21.857 | 75.699 | 27.531 | 1.00 | 45.90 | C |
| ATOM | 13208 | CG | GLU | D | 424 | 22.949 | 75.679 | 26.478 | 1.00 | 48.16 | C |
| ATOM | 13209 | CD | GLU | D | 424 | 23.582 | 74.303 | 26.329 | 1.00 | 50.47 | C |
| ATOM | 13210 | OE1 | GLU | D | 424 | 24.369 | 73.911 | 27.220 | 1.00 | 51.87 | O |
| ATOM | 13211 | OE2 | GLU | D | 424 | 23.285 | 73.612 | 25.329 | 1.00 | 49.86 | O |
| ATOM | 13212 | N | GLY | D | 425 | 19.783 | 77.483 | 25.838 | 1.00 | 46.93 | N |
| ATOM | 13213 | CA | GLY | D | 425 | 19.457 | 78.096 | 24.559 | 1.00 | 47.24 | C |
| ATOM | 13214 | C | GLY | D | 425 | 18.438 | 79.224 | 24.551 | 1.00 | 47.38 | C |
| ATOM | 13215 | O | GLY | D | 425 | 18.041 | 79.686 | 23.479 | 1.00 | 48.18 | O |
| ATOM | 13216 | N | GLN | D | 426 | 18.013 | 79.678 | 25.726 | 1.00 | 45.76 | N |
| ATOM | 13217 | CA | GLN | D | 426 | 17.034 | 80.757 | 25.800 | 1.00 | 45.00 | C |
| ATOM | 13218 | C | GLN | D | 426 | 17.411 | 81.832 | 26.809 | 1.00 | 45.43 | C |
| ATOM | 13219 | O | GLN | D | 426 | 16.748 | 82.865 | 26.904 | 1.00 | 45.27 | O |
| ATOM | 13220 | CB | GLN | D | 426 | 15.654 | 80.197 | 26.152 | 1.00 | 43.91 | C |
| ATOM | 13221 | CG | GLN | D | 426 | 14.984 | 79.437 | 25.020 | 1.00 | 44.58 | C |
| ATOM | 13222 | CD | GLN | D | 426 | 13.566 | 79.018 | 25.360 | 1.00 | 44.42 | C |
| ATOM | 13223 | OE1 | GLN | D | 426 | 12.776 | 79.813 | 25.876 | 1.00 | 42.33 | O |
| ATOM | 13224 | NE2 | GLN | D | 426 | 13.231 | 77.767 | 25.060 | 1.00 | 44.54 | N |
| ATOM | 13225 | N | PHE | D | 427 | 18.474 | 81.587 | 27.565 | 1.00 | 46.15 | N |
| ATOM | 13226 | CA | PHE | D | 427 | 18.920 | 82.541 | 28.572 | 1.00 | 46.23 | C |
| ATOM | 13227 | C | PHE | D | 427 | 20.373 | 82.935 | 28.341 | 1.00 | 47.48 | C |
| ATOM | 13228 | O | PHE | D | 427 | 20.669 | 84.146 | 28.422 | 1.00 | 49.58 | O |
| ATOM | 13229 | CB | PHE | D | 427 | 18.734 | 81.948 | 29.977 | 1.00 | 44.51 | C |
| ATOM | 13230 | CG | PHE | D | 427 | 17.289 | 81.764 | 30.374 | 1.00 | 42.65 | C |
| ATOM | 13231 | CD1 | PHE | D | 427 | 16.448 | 80.933 | 29.638 | 1.00 | 41.55 | C |
| ATOM | 13232 | CD2 | PHE | D | 427 | 16.765 | 82.434 | 31.475 | 1.00 | 41.39 | C |
| ATOM | 13233 | CE1 | PHE | D | 427 | 15.106 | 80.775 | 29.993 | 1.00 | 42.22 | C |
| ATOM | 13234 | CE2 | PHE | D | 427 | 15.424 | 82.282 | 31.840 | 1.00 | 41.06 | C |
| ATOM | 13235 | CZ | PHE | D | 427 | 14.593 | 81.452 | 31.098 | 1.00 | 40.81 | C |
| TER | 13236 | | PHE | D | 427 | | | | | | |
| HETATM | 13237 | MG | MG | A | 451 | 19.931 | 44.798 | 51.727 | 1.00 | 24.82 | MG |
| HETATM | 13238 | MG | MG | B | 452 | 5.589 | 58.039 | 80.187 | 1.00 | 25.07 | MG |
| HETATM | 13239 | MG | MG | C | 453 | 8.468 | 67.722 | 37.665 | 1.00 | 24.33 | MG |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HETATM13240 | MG | MG | D | 454 | 10.785 | 83.994 | 68.434 | 1.00 | 25.63 | MG |
| HETATM13241 | C1 | GLV | | 461 | 21.399 | 42.936 | 53.245 | 1.00 | 36.28 | C |
| HETATM13242 | O1 | GLV | | 461 | 21.483 | 43.243 | 52.058 | 1.00 | 39.11 | O |
| HETATM13243 | C2 | GLV | | 461 | 20.228 | 43.396 | 54.090 | 1.00 | 36.19 | C |
| HETATM13244 | O2 | GLV | | 461 | 19.361 | 44.135 | 53.570 | 1.00 | 38.10 | O |
| HETATM13245 | O3 | GLV | | 461 | 20.171 | 43.013 | 55.275 | 1.00 | 32.58 | O |
| HETATM13246 | C1 | GLV | | 462 | 4.422 | 55.437 | 80.999 | 1.00 | 35.39 | C |
| HETATM13247 | O1 | GLV | | 462 | 4.092 | 56.569 | 81.351 | 1.00 | 37.16 | O |
| HETATM13248 | C2 | GLV | | 462 | 5.557 | 55.215 | 80.012 | 1.00 | 34.70 | C |
| HETATM13249 | O2 | GLV | | 462 | 6.226 | 56.200 | 79.627 | 1.00 | 33.08 | O |
| HETATM13250 | O3 | GLV | | 462 | 5.777 | 54.049 | 79.625 | 1.00 | 29.25 | O |
| HETATM13251 | C1 | GLV | | 463 | 6.877 | 69.968 | 36.687 | 1.00 | 37.08 | C |
| HETATM13252 | O1 | GLV | | 463 | 7.182 | 68.867 | 36.226 | 1.00 | 39.05 | O |
| HETATM13253 | C2 | GLV | | 463 | 7.672 | 70.587 | 37.823 | 1.00 | 37.44 | C |
| HETATM13254 | O2 | GLV | | 463 | 8.644 | 69.953 | 38.288 | 1.00 | 37.94 | O |
| HETATM13255 | O3 | GLV | | 463 | 7.323 | 71.711 | 38.247 | 1.00 | 34.93 | O |
| HETATM13256 | C1 | GLV | | 464 | 11.817 | 86.236 | 67.201 | 1.00 | 38.96 | C |
| HETATM13257 | O1 | GLV | | 464 | 11.696 | 85.873 | 68.374 | 1.00 | 40.99 | O |
| HETATM13258 | C2 | GLV | | 464 | 11.042 | 85.554 | 66.084 | 1.00 | 38.44 | C |
| HETATM13259 | O2 | GLV | | 464 | 10.326 | 84.570 | 66.368 | 1.00 | 38.98 | O |
| HETATM13260 | O3 | GLV | | 464 | 11.146 | 86.008 | 64.925 | 1.00 | 35.52 | O |
| HETATM13261 | C1 | SIN | | 471 | 19.834 | 40.392 | 51.278 | 1.00 | 38.11 | C |
| HETATM13262 | O1 | SIN | | 471 | 20.903 | 39.817 | 51.575 | 1.00 | 42.00 | O |
| HETATM13263 | O2 | SIN | | 471 | 19.681 | 40.969 | 50.186 | 1.00 | 38.89 | O |
| HETATM13264 | C2 | SIN | | 471 | 18.665 | 40.410 | 52.272 | 1.00 | 37.06 | C |
| HETATM13265 | C3 | SIN | | 471 | 18.992 | 39.825 | 53.669 | 1.00 | 31.93 | C |
| HETATM13266 | C4 | SIN | | 471 | 19.145 | 38.310 | 53.665 | 1.00 | 31.04 | C |
| HETATM13267 | O3 | SIN | | 471 | 18.318 | 37.616 | 53.038 | 1.00 | 30.87 | O |
| HETATM13268 | O4 | SIN | | 471 | 20.104 | 37.817 | 54.286 | 1.00 | 29.67 | O |
| HETATM13269 | C1 | SIN | | 472 | 6.301 | 55.746 | 83.967 | 1.00 | 40.38 | C |
| HETATM13270 | O1 | SIN | | 472 | 5.516 | 55.012 | 84.603 | 1.00 | 44.38 | O |
| HETATM13271 | O2 | SIN | | 472 | 6.095 | 56.968 | 83.837 | 1.00 | 42.14 | O |
| HETATM13272 | C2 | SIN | | 472 | 7.558 | 55.154 | 83.315 | 1.00 | 40.46 | C |
| HETATM13273 | C3 | SIN | | 472 | 7.485 | 53.638 | 83.018 | 1.00 | 34.48 | C |
| HETATM13274 | C4 | SIN | | 472 | 7.562 | 52.780 | 84.269 | 1.00 | 32.01 | C |
| HETATM13275 | O3 | SIN | | 472 | 8.496 | 52.959 | 85.077 | 1.00 | 31.60 | O |
| HETATM13276 | O4 | SIN | | 472 | 6.672 | 51.931 | 84.446 | 1.00 | 27.60 | O |
| HETATM13277 | C1 | SIN | | 473 | 9.292 | 70.290 | 34.188 | 1.00 | 39.64 | C |
| HETATM13278 | O1 | SIN | | 473 | 8.207 | 70.705 | 33.720 | 1.00 | 42.50 | O |
| HETATM13279 | O2 | SIN | | 473 | 9.643 | 69.097 | 34.081 | 1.00 | 40.56 | O |
| HETATM13280 | C2 | SIN | | 473 | 10.239 | 71.248 | 34.930 | 1.00 | 39.26 | C |
| HETATM13281 | C3 | SIN | | 473 | 9.621 | 72.605 | 35.325 | 1.00 | 32.15 | C |
| HETATM13282 | C4 | SIN | | 473 | 9.585 | 73.588 | 34.176 | 1.00 | 30.98 | C |
| HETATM13283 | O3 | SIN | | 473 | 10.661 | 73.965 | 33.666 | 1.00 | 29.61 | O |
| HETATM13284 | O4 | SIN | | 473 | 8.471 | 73.975 | 33.776 | 1.00 | 27.95 | O |
| HETATM13285 | C1 | SIN | | 474 | 9.082 | 88.302 | 68.562 | 1.00 | 42.92 | C |
| HETATM13286 | O1 | SIN | | 474 | 9.617 | 89.433 | 68.545 | 1.00 | 45.59 | O |
| HETATM13287 | O2 | SIN | | 474 | 9.161 | 87.541 | 69.550 | 1.00 | 43.20 | O |
| HETATM13288 | C2 | SIN | | 474 | 8.297 | 87.818 | 67.340 | 1.00 | 41.08 | C |
| HETATM13289 | C3 | SIN | | 474 | 8.749 | 88.446 | 65.997 | 1.00 | 36.66 | C |
| HETATM13290 | C4 | SIN | | 474 | 8.254 | 89.869 | 65.806 | 1.00 | 35.13 | C |
| HETATM13291 | O3 | SIN | | 474 | 7.042 | 90.122 | 65.978 | 1.00 | 33.82 | O |
| HETATM13292 | O4 | SIN | | 474 | 9.089 | 90.736 | 65.492 | 1.00 | 33.29 | O |
| HETATM13293 | O | HOH | | 1001 | 20.832 | 45.634 | 50.012 | 1.00 | 16.59 | O |
| HETATM13294 | O | HOH | | 1002 | 18.938 | 43.481 | 50.312 | 1.00 | 22.70 | O |
| HETATM13295 | O | HOH | | 1003 | 18.149 | 46.001 | 51.382 | 1.00 | 18.51 | O |
| HETATM13296 | O | HOH | | 1004 | 4.093 | 59.562 | 80.831 | 1.00 | 15.02 | O |
| HETATM13297 | O | HOH | | 1005 | 6.343 | 58.598 | 81.912 | 1.00 | 31.39 | O |
| HETATM13298 | O | HOH | | 1006 | 6.888 | 59.226 | 79.046 | 1.00 | 19.64 | O |
| HETATM13299 | O | HOH | | 1007 | 8.082 | 65.773 | 37.042 | 1.00 | 16.64 | O |
| HETATM13300 | O | HOH | | 1008 | 10.154 | 67.748 | 36.217 | 1.00 | 22.48 | O |
| HETATM13301 | O | HOH | | 1009 | 10.064 | 67.444 | 38.996 | 1.00 | 22.87 | O |
| HETATM13302 | O | HOH | | 1010 | 11.457 | 83.608 | 70.318 | 1.00 | 21.64 | O |
| HETATM13303 | O | HOH | | 1011 | 9.211 | 84.976 | 69.393 | 1.00 | 26.53 | O |
| HETATM13304 | O | HOH | | 1012 | 9.460 | 82.467 | 68.257 | 1.00 | 17.98 | O |
| HETATM13305 | O | HOH | | 1013 | -2.768 | 71.993 | 63.973 | 1.00 | 11.69 | O |
| HETATM13306 | O | HOH | | 1014 | 21.520 | 64.213 | 72.851 | 1.00 | 12.08 | O |
| HETATM13307 | O | HOH | | 1015 | 23.691 | 67.255 | 48.733 | 1.00 | 16.46 | O |
| HETATM13308 | O | HOH | | 1016 | 2.308 | 51.175 | 52.314 | 1.00 | 12.08 | O |
| HETATM13309 | O | HOH | | 1017 | 18.219 | 53.128 | 18.751 | 1.00 | 21.15 | O |
| HETATM13310 | O | HOH | | 1018 | 6.672 | 52.604 | 73.236 | 1.00 | 15.33 | O |
| HETATM13311 | O | HOH | | 1019 | 14.369 | 49.867 | 73.070 | 1.00 | 13.93 | O |
| HETATM13312 | O | HOH | | 1020 | 13.360 | 56.920 | 79.034 | 1.00 | 9.97 | O |
| HETATM13313 | O | HOH | | 1021 | 11.480 | 41.483 | 52.391 | 1.00 | 14.85 | O |
| HETATM13314 | O | HOH | | 1022 | 15.054 | 57.174 | 44.060 | 1.00 | 12.34 | O |
| HETATM13315 | O | HOH | | 1023 | 24.147 | 46.736 | 48.292 | 1.00 | 16.14 | O |
| HETATM13316 | O | HOH | | 1024 | -3.659 | 52.479 | 48.035 | 1.00 | 9.56 | O |
| HETATM13317 | O | HOH | | 1025 | 30.345 | 63.912 | 49.247 | 1.00 | 16.18 | O |
| HETATM13318 | O | HOH | | 1026 | 7.896 | 62.860 | 46.293 | 1.00 | 9.43 | O |
| HETATM13319 | O | HOH | | 1027 | 25.827 | 66.031 | 75.870 | 1.00 | 15.79 | O |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13320 | O | HOH | 1028 | 14.354 | 83.611 | 72.504 | 1.00 | 18.55 | O |
| HETATM13321 | O | HOH | 1029 | 30.488 | 61.634 | 79.664 | 1.00 | 17.47 | O |
| HETATM13322 | O | HOH | 1030 | 20.672 | 50.054 | 75.827 | 1.00 | 6.68 | O |
| HETATM13323 | O | HOH | 1031 | -7.549 | 56.714 | 59.970 | 1.00 | 12.08 | O |
| HETATM13324 | O | HOH | 1032 | 4.792 | 35.964 | 64.165 | 1.00 | 13.51 | O |
| HETATM13325 | O | HOH | 1033 | 6.630 | 79.663 | 68.547 | 1.00 | 17.28 | O |
| HETATM13326 | O | HOH | 1034 | -8.276 | 63.548 | 54.816 | 1.00 | 11.61 | O |
| HETATM13327 | O | HOH | 1035 | 7.616 | 66.039 | 25.593 | 1.00 | 16.06 | O |
| HETATM13328 | O | HOH | 1036 | 8.794 | 50.611 | 63.607 | 1.00 | 13.18 | O |
| HETATM13329 | O | HOH | 1037 | 31.655 | 65.683 | 62.723 | 1.00 | 11.85 | O |
| HETATM13330 | O | HOH | 1038 | 18.125 | 65.777 | 66.878 | 1.00 | 14.69 | O |
| HETATM13331 | O | HOH | 1039 | 11.420 | 61.111 | 21.843 | 1.00 | 15.80 | O |
| HETATM13332 | O | HOH | 1040 | 16.309 | 53.539 | 67.571 | 1.00 | 12.75 | O |
| HETATM13333 | O | HOH | 1041 | 8.209 | 54.659 | 50.768 | 1.00 | 12.16 | O |
| HETATM13334 | O | HOH | 1042 | 14.560 | 47.683 | 50.453 | 1.00 | 10.33 | O |
| HETATM13335 | O | HOH | 1043 | 2.660 | 54.984 | 50.763 | 1.00 | 12.06 | O |
| HETATM13336 | O | HOH | 1044 | 10.079 | 54.721 | 46.810 | 1.00 | 16.83 | O |
| HETATM13337 | O | HOH | 1045 | 21.728 | 59.982 | 72.343 | 1.00 | 16.55 | O |
| HETATM13338 | O | HOH | 1046 | 4.472 | 57.716 | 54.156 | 1.00 | 14.85 | O |
| HETATM13339 | O | HOH | 1047 | 26.316 | 66.992 | 46.947 | 1.00 | 18.95 | O |
| HETATM13340 | O | HOH | 1048 | 12.026 | 44.256 | 63.186 | 1.00 | 8.79 | O |
| HETATM13341 | O | HOH | 1049 | 23.391 | 63.659 | 50.608 | 1.00 | 11.55 | O |
| HETATM13342 | O | HOH | 1050 | -14.600 | 63.092 | 71.752 | 1.00 | 15.25 | O |
| HETATM13343 | O | HOH | 1051 | -8.077 | 67.893 | 60.589 | 1.00 | 18.55 | O |
| HETATM13344 | O | HOH | 1052 | 22.747 | 57.274 | 83.058 | 1.00 | 17.17 | O |
| HETATM13345 | O | HOH | 1053 | 13.016 | 74.428 | 67.438 | 1.00 | 8.99 | O |
| HETATM13346 | O | HOH | 1054 | -5.393 | 73.020 | 65.464 | 1.00 | 17.33 | O |
| HETATM13347 | O | HOH | 1055 | -2.402 | 74.348 | 93.882 | 1.00 | 21.33 | O |
| HETATM13348 | O | HOH | 1056 | 12.164 | 43.747 | 54.196 | 1.00 | 13.13 | O |
| HETATM13349 | O | HOH | 1057 | 13.424 | 65.908 | 41.015 | 1.00 | 16.04 | O |
| HETATM13350 | O | HOH | 1058 | 4.980 | 62.810 | 71.589 | 1.00 | 18.04 | O |
| HETATM13351 | O | HOH | 1059 | 19.985 | 59.115 | 50.069 | 1.00 | 8.61 | O |
| HETATM13352 | O | HOH | 1060 | -1.653 | 68.561 | 65.703 | 1.00 | 16.41 | O |
| HETATM13353 | O | HOH | 1061 | 19.736 | 87.893 | 56.420 | 1.00 | 17.21 | O |
| HETATM13354 | O | HOH | 1062 | 11.466 | 45.064 | 43.342 | 1.00 | 19.17 | O |
| HETATM13355 | O | HOH | 1063 | 9.510 | 67.744 | 51.435 | 1.00 | 18.40 | O |
| HETATM13356 | O | HOH | 1064 | 29.821 | 29.626 | 63.039 | 1.00 | 24.07 | O |
| HETATM13357 | O | HOH | 1065 | 28.192 | 77.740 | 67.085 | 1.00 | 19.87 | O |
| HETATM13358 | O | HOH | 1066 | 18.343 | 54.549 | 52.554 | 1.00 | 13.30 | O |
| HETATM13359 | O | HOH | 1067 | 31.171 | 68.996 | 61.006 | 1.00 | 19.59 | O |
| HETATM13360 | O | HOH | 1068 | 14.865 | 66.182 | 71.578 | 1.00 | 18.23 | O |
| HETATM13361 | O | HOH | 1069 | 20.135 | 67.635 | 70.862 | 1.00 | 7.85 | O |
| HETATM13362 | O | HOH | 1070 | 2.617 | 49.366 | 56.444 | 1.00 | 15.04 | O |
| HETATM13363 | O | HOH | 1071 | 13.477 | 55.033 | 44.744 | 1.00 | 18.88 | O |
| HETATM13364 | O | HOH | 1072 | 19.087 | 37.108 | 26.723 | 1.00 | 19.54 | O |
| HETATM13365 | O | HOH | 1073 | 3.131 | 56.656 | 57.731 | 1.00 | 16.13 | O |
| HETATM13366 | O | HOH | 1074 | 12.652 | 69.199 | 73.888 | 1.00 | 15.96 | O |
| HETATM13367 | O | HOH | 1075 | 44.050 | 55.699 | 44.359 | 1.00 | 28.16 | O |
| HETATM13368 | O | HOH | 1076 | 25.663 | 63.990 | 61.631 | 1.00 | 19.89 | O |
| HETATM13369 | O | HOH | 1077 | 12.455 | 60.918 | 54.033 | 1.00 | 21.88 | O |
| HETATM13370 | O | HOH | 1078 | 21.622 | 54.614 | 73.701 | 1.00 | 14.61 | O |
| HETATM13371 | O | HOH | 1079 | 6.104 | 59.883 | 54.816 | 1.00 | 21.57 | O |
| HETATM13372 | O | HOH | 1080 | 29.471 | 71.300 | 60.428 | 1.00 | 16.43 | O |
| HETATM13373 | O | HOH | 1081 | -9.628 | 58.122 | 68.965 | 1.00 | 16.15 | O |
| HETATM13374 | O | HOH | 1082 | 7.695 | 56.148 | 46.136 | 1.00 | 7.73 | O |
| HETATM13375 | O | HOH | 1083 | 32.680 | 56.347 | 64.747 | 1.00 | 11.13 | O |
| HETATM13376 | O | HOH | 1084 | 4.669 | 77.947 | 67.742 | 1.00 | 12.43 | O |
| HETATM13377 | O | HOH | 1085 | 2.198 | 64.652 | 95.923 | 1.00 | 20.58 | O |
| HETATM13378 | O | HOH | 1086 | 28.792 | 64.902 | 60.095 | 1.00 | 24.17 | O |
| HETATM13379 | O | HOH | 1087 | -0.587 | 38.513 | 86.798 | 1.00 | 21.60 | O |
| HETATM13380 | O | HOH | 1088 | 10.930 | 59.602 | 39.687 | 1.00 | 20.70 | O |
| HETATM13381 | O | HOH | 1089 | 15.622 | 66.107 | 42.768 | 1.00 | 13.83 | O |
| HETATM13382 | O | HOH | 1090 | 8.898 | 70.436 | 75.179 | 1.00 | 15.25 | O |
| HETATM13383 | O | HOH | 1091 | -3.068 | 56.147 | 55.707 | 1.00 | 18.93 | O |
| HETATM13384 | O | HOH | 1092 | 24.961 | 74.772 | 39.145 | 1.00 | 24.26 | O |
| HETATM13385 | O | HOH | 1093 | -0.311 | 62.720 | 63.435 | 1.00 | 16.96 | O |
| HETATM13386 | O | HOH | 1094 | 12.021 | 48.483 | 50.763 | 1.00 | 17.26 | O |
| HETATM13387 | O | HOH | 1095 | 10.213 | 50.188 | 23.642 | 1.00 | 16.09 | O |
| HETATM13388 | O | HOH | 1096 | 12.568 | 55.424 | 47.308 | 1.00 | 6.77 | O |
| HETATM13389 | O | HOH | 1097 | -10.177 | 61.002 | 29.650 | 1.00 | 18.59 | O |
| HETATM13390 | O | HOH | 1098 | 30.782 | 63.226 | 63.040 | 1.00 | 16.81 | O |
| HETATM13391 | O | HOH | 1099 | 25.937 | 33.937 | 51.914 | 1.00 | 12.37 | O |
| HETATM13392 | O | HOH | 1100 | 30.507 | 54.427 | 64.684 | 1.00 | 20.61 | O |
| HETATM13393 | O | HOH | 1101 | 5.423 | 75.405 | 54.412 | 1.00 | 14.21 | O |
| HETATM13394 | O | HOH | 1102 | 8.762 | 69.613 | 71.145 | 1.00 | 18.11 | O |
| HETATM13395 | O | HOH | 1103 | 12.789 | 88.835 | 27.467 | 1.00 | 31.66 | O |
| HETATM13396 | O | HOH | 1104 | 3.886 | 58.756 | 92.225 | 1.00 | 18.58 | O |
| HETATM13397 | O | HOH | 1105 | 11.036 | 93.146 | 76.616 | 1.00 | 21.20 | O |
| HETATM13398 | O | HOH | 1106 | 23.156 | 45.602 | 78.765 | 1.00 | 17.55 | O |
| HETATM13399 | O | HOH | 1107 | 10.052 | 68.761 | 73.157 | 1.00 | 7.83 | O |

| HETATM13400 | O | HOH | 1108 | -13.051 | 77.116 | 62.760 | 1.00 | 22.34 | O |
|---|---|---|---|---|---|---|---|---|---|
| HETATM13401 | O | HOH | 1109 | 14.022 | 75.252 | 52.313 | 1.00 | 19.97 | O |
| HETATM13402 | O | HOH | 1110 | -7.075 | 62.672 | 52.243 | 1.00 | 18.45 | O |
| HETATM13403 | O | HOH | 1111 | -5.260 | 42.191 | 75.514 | 1.00 | 23.56 | O |
| HETATM13404 | O | HOH | 1112 | 12.730 | 44.097 | 83.400 | 1.00 | 19.45 | O |
| HETATM13405 | O | HOH | 1113 | -10.189 | 63.802 | 29.942 | 1.00 | 24.20 | O |
| HETATM13406 | O | HOH | 1114 | 12.645 | 81.461 | 60.029 | 1.00 | 34.01 | O |
| HETATM13407 | O | HOH | 1115 | 11.775 | 76.169 | 44.702 | 1.00 | 19.97 | O |
| HETATM13408 | O | HOH | 1116 | 6.045 | 41.409 | 62.105 | 1.00 | 17.38 | O |
| HETATM13409 | O | HOH | 1117 | 15.750 | 33.071 | 61.786 | 1.00 | 15.72 | O |
| HETATM13410 | O | HOH | 1118 | -7.953 | 51.434 | 64.711 | 1.00 | 15.98 | O |
| HETATM13411 | O | HOH | 1119 | -9.020 | 58.255 | 58.206 | 1.00 | 17.41 | O |
| HETATM13412 | O | HOH | 1120 | 32.842 | 41.670 | 66.244 | 1.00 | 27.78 | O |
| HETATM13413 | O | HOH | 1121 | 13.317 | 44.658 | 60.969 | 1.00 | 19.43 | O |
| HETATM13414 | O | HOH | 1122 | 7.710 | 66.561 | 87.383 | 1.00 | 23.79 | O |
| HETATM13415 | O | HOH | 1123 | 3.379 | 38.731 | 52.317 | 1.00 | 20.38 | O |
| HETATM13416 | O | HOH | 1124 | -2.182 | 74.080 | 60.236 | 1.00 | 19.33 | O |
| HETATM13417 | O | HOH | 1125 | -9.700 | 55.799 | 41.685 | 1.00 | 18.79 | O |
| HETATM13418 | O | HOH | 1126 | 19.021 | 47.585 | 60.121 | 1.00 | 17.72 | O |
| HETATM13419 | O | HOH | 1127 | 26.870 | 17.734 | 64.177 | 1.00 | 23.79 | O |
| HETATM13420 | O | HOH | 1128 | -16.246 | 59.845 | 46.110 | 1.00 | 21.86 | O |
| HETATM13421 | O | HOH | 1129 | -3.477 | 75.170 | 81.245 | 1.00 | 29.58 | O |
| HETATM13422 | O | HOH | 1130 | 30.864 | 80.295 | 58.405 | 1.00 | 20.24 | O |
| HETATM13423 | O | HOH | 1131 | 4.167 | 62.125 | 73.968 | 1.00 | 14.34 | O |
| HETATM13424 | O | HOH | 1132 | 5.109 | 56.378 | 92.687 | 1.00 | 23.17 | O |
| HETATM13425 | O | HOH | 1133 | -5.460 | 42.700 | 51.482 | 1.00 | 19.63 | O |
| HETATM13426 | O | HOH | 1134 | -14.475 | 51.415 | 50.763 | 1.00 | 29.68 | O |
| HETATM13427 | O | HOH | 1135 | 20.025 | 58.648 | 47.383 | 1.00 | 20.82 | O |
| HETATM13428 | O | HOH | 1136 | 7.105 | 48.626 | 35.485 | 1.00 | 28.15 | O |
| HETATM13429 | O | HOH | 1137 | 30.793 | 53.912 | 61.992 | 1.00 | 19.06 | O |
| HETATM13430 | O | HOH | 1138 | 1.305 | 54.403 | 20.427 | 1.00 | 22.50 | O |
| HETATM13431 | O | HOH | 1139 | -5.642 | 50.650 | 65.937 | 1.00 | 18.38 | O |
| HETATM13432 | O | HOH | 1140 | 10.005 | 66.258 | 65.054 | 1.00 | 20.70 | O |
| HETATM13433 | O | HOH | 1141 | 18.340 | 51.156 | 45.896 | 1.00 | 17.89 | O |
| HETATM13434 | O | HOH | 1142 | 29.744 | 67.674 | 84.744 | 1.00 | 24.88 | O |
| HETATM13435 | O | HOH | 1143 | -11.000 | 59.965 | 32.204 | 1.00 | 16.47 | O |
| HETATM13436 | O | HOH | 1144 | 28.295 | 29.866 | 50.108 | 1.00 | 28.29 | O |
| HETATM13437 | O | HOH | 1145 | -2.237 | 77.882 | 42.111 | 1.00 | 27.33 | O |
| HETATM13438 | O | HOH | 1146 | 4.008 | 45.178 | 59.843 | 1.00 | 19.68 | O |
| HETATM13439 | O | HOH | 1147 | 2.533 | 67.160 | 69.488 | 1.00 | 16.46 | O |
| HETATM13440 | O | HOH | 1148 | 20.610 | 69.010 | 64.702 | 1.00 | 12.41 | O |
| HETATM13441 | O | HOH | 1149 | 6.767 | 57.873 | 47.951 | 1.00 | 16.20 | O |
| HETATM13442 | O | HOH | 1150 | 28.532 | 72.115 | 62.696 | 1.00 | 24.48 | O |
| HETATM13443 | O | HOH | 1151 | 16.449 | 42.544 | 70.002 | 1.00 | 19.74 | O |
| HETATM13444 | O | HOH | 1152 | -12.237 | 46.111 | 34.791 | 1.00 | 27.09 | O |
| HETATM13445 | O | HOH | 1153 | 29.916 | 67.595 | 49.665 | 1.00 | 26.32 | O |
| HETATM13446 | O | HOH | 1154 | 9.926 | 61.406 | 78.154 | 1.00 | 15.52 | O |
| HETATM13447 | O | HOH | 1155 | 18.084 | 63.031 | 48.824 | 1.00 | 16.45 | O |
| HETATM13448 | O | HOH | 1156 | 14.830 | 55.273 | 58.579 | 1.00 | 12.41 | O |
| HETATM13449 | O | HOH | 1157 | 14.751 | 70.973 | 73.208 | 1.00 | 12.43 | O |
| HETATM13450 | O | HOH | 1158 | 2.317 | 69.173 | 71.436 | 1.00 | 18.96 | O |
| HETATM13451 | O | HOH | 1159 | 13.896 | 34.414 | 51.074 | 1.00 | 19.69 | O |
| HETATM13452 | O | HOH | 1160 | 11.130 | 85.498 | 49.606 | 1.00 | 17.94 | O |
| HETATM13453 | O | HOH | 1161 | 7.575 | 63.426 | 43.712 | 1.00 | 13.68 | O |
| HETATM13454 | O | HOH | 1162 | -4.248 | 54.595 | 52.215 | 1.00 | 15.17 | O |
| HETATM13455 | O | HOH | 1163 | -14.098 | 55.837 | 58.473 | 1.00 | 19.13 | O |
| HETATM13456 | O | HOH | 1164 | 0.974 | 67.193 | 59.239 | 1.00 | 19.21 | O |
| HETATM13457 | O | HOH | 1165 | 12.982 | 53.560 | 88.526 | 1.00 | 12.21 | O |
| HETATM13458 | O | HOH | 1166 | 6.027 | 82.352 | 55.385 | 1.00 | 15.98 | O |
| HETATM13459 | O | HOH | 1167 | -7.634 | 78.706 | 39.263 | 1.00 | 21.16 | O |
| HETATM13460 | O | HOH | 1168 | 1.357 | 60.656 | 53.202 | 1.00 | 12.58 | O |
| HETATM13461 | O | HOH | 1169 | -7.370 | 53.680 | 52.389 | 1.00 | 18.12 | O |
| HETATM13462 | O | HOH | 1170 | -12.560 | 51.293 | 44.734 | 1.00 | 23.31 | O |
| HETATM13463 | O | HOH | 1171 | 22.336 | 71.374 | 49.315 | 1.00 | 17.43 | O |
| HETATM13464 | O | HOH | 1172 | 31.785 | 46.178 | 26.049 | 1.00 | 27.29 | O |
| HETATM13465 | O | HOH | 1173 | -7.451 | 61.960 | 45.399 | 1.00 | 16.15 | O |
| HETATM13466 | O | HOH | 1174 | 13.059 | 23.762 | 66.168 | 1.00 | 26.57 | O |
| HETATM13467 | O | HOH | 1175 | -8.596 | 43.889 | 69.197 | 1.00 | 22.33 | O |
| HETATM13468 | O | HOH | 1176 | 32.247 | 67.389 | 54.062 | 1.00 | 21.38 | O |
| HETATM13469 | O | HOH | 1177 | -6.163 | 52.744 | 67.829 | 1.00 | 15.22 | O |
| HETATM13470 | O | HOH | 1178 | 3.872 | 71.238 | 71.298 | 1.00 | 14.61 | O |
| HETATM13471 | O | HOH | 1179 | 12.628 | 33.305 | 55.360 | 1.00 | 18.83 | O |
| HETATM13472 | O | HOH | 1180 | 6.933 | 42.150 | 44.859 | 1.00 | 24.17 | O |
| HETATM13473 | O | HOH | 1181 | -9.421 | 61.452 | 56.141 | 1.00 | 17.47 | O |
| HETATM13474 | O | HOH | 1182 | 15.982 | 74.643 | 96.868 | 1.00 | 21.78 | O |
| HETATM13475 | O | HOH | 1183 | -3.396 | 50.198 | 51.494 | 1.00 | 18.71 | O |
| HETATM13476 | O | HOH | 1184 | 11.250 | 39.773 | 89.500 | 1.00 | 21.73 | O |
| HETATM13477 | O | HOH | 1185 | 27.577 | 80.234 | 83.890 | 1.00 | 26.72 | O |
| HETATM13478 | O | HOH | 1186 | -15.917 | 62.963 | 60.741 | 1.00 | 28.32 | O |
| HETATM13479 | O | HOH | 1187 | 17.857 | 59.638 | 45.913 | 1.00 | 14.71 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13480 | O | HOH | 1188 | -2.812 | 59.372 | 59.403 | 1.00 | 20.71 | O |
| HETATM13481 | O | HOH | 1189 | -8.748 | 70.998 | 63.627 | 1.00 | 17.27 | O |
| HETATM13482 | O | HOH | 1190 | 27.022 | 67.335 | 69.695 | 1.00 | 19.64 | O |
| HETATM13483 | O | HOH | 1191 | -2.352 | 76.904 | 79.031 | 1.00 | 31.79 | O |
| HETATM13484 | O | HOH | 1192 | 19.443 | 62.516 | 36.264 | 1.00 | 30.53 | O |
| HETATM13485 | O | HOH | 1193 | 22.147 | 50.057 | 40.664 | 1.00 | 24.17 | O |
| HETATM13486 | O | HOH | 1194 | 6.703 | 55.340 | 33.871 | 1.00 | 29.67 | O |
| HETATM13487 | O | HOH | 1195 | -5.371 | 72.277 | 60.877 | 1.00 | 19.58 | O |
| HETATM13488 | O | HOH | 1196 | -3.320 | 87.384 | 52.287 | 1.00 | 26.29 | O |
| HETATM13489 | O | HOH | 1197 | 30.425 | 61.668 | 60.717 | 1.00 | 25.91 | O |
| HETATM13490 | O | HOH | 1198 | 20.258 | 67.618 | 55.650 | 1.00 | 14.99 | O |
| HETATM13491 | O | HOH | 1199 | 13.542 | 46.083 | 84.888 | 1.00 | 19.13 | O |
| HETATM13492 | O | HOH | 1200 | 33.267 | 70.175 | 67.808 | 1.00 | 27.98 | O |
| HETATM13493 | O | HOH | 1201 | 24.909 | 36.025 | 34.617 | 1.00 | 31.58 | O |
| HETATM13494 | O | HOH | 1202 | 15.340 | 57.634 | 69.713 | 1.00 | 20.11 | O |
| HETATM13495 | O | HOH | 1203 | -6.959 | 70.306 | 48.907 | 1.00 | 19.18 | O |
| HETATM13496 | O | HOH | 1204 | -16.183 | 58.090 | 81.108 | 1.00 | 28.90 | O |
| HETATM13497 | O | HOH | 1205 | -3.316 | 44.693 | 34.731 | 1.00 | 24.96 | O |
| HETATM13498 | O | HOH | 1206 | -6.487 | 68.274 | 47.347 | 1.00 | 21.01 | O |
| HETATM13499 | O | HOH | 1207 | 15.278 | 71.526 | 40.816 | 1.00 | 22.26 | O |
| HETATM13500 | O | HOH | 1208 | 37.078 | 77.534 | 67.982 | 1.00 | 24.29 | O |
| HETATM13501 | O | HOH | 1209 | -5.436 | 49.848 | 33.740 | 1.00 | 25.13 | O |
| HETATM13502 | O | HOH | 1210 | 4.736 | 74.610 | 58.951 | 1.00 | 20.98 | O |
| HETATM13503 | O | HOH | 1211 | 37.893 | 46.104 | 36.279 | 1.00 | 31.74 | O |
| HETATM13504 | O | HOH | 1212 | -3.354 | 52.091 | 24.721 | 1.00 | 20.26 | O |
| HETATM13505 | O | HOH | 1213 | 3.440 | 38.024 | 97.814 | 1.00 | 33.32 | O |
| HETATM13506 | O | HOH | 1214 | -11.779 | 65.418 | 79.972 | 1.00 | 15.56 | O |
| HETATM13507 | O | HOH | 1215 | 32.405 | 45.449 | 71.848 | 1.00 | 28.24 | O |
| HETATM13508 | O | HOH | 1216 | 13.036 | 82.215 | 34.289 | 1.00 | 28.52 | O |
| HETATM13509 | O | HOH | 1217 | 27.755 | 68.832 | 63.071 | 1.00 | 34.33 | O |
| HETATM13510 | O | HOH | 1218 | -16.448 | 41.742 | 47.307 | 1.00 | 28.31 | O |
| HETATM13511 | O | HOH | 1219 | 9.400 | 47.936 | 29.562 | 1.00 | 35.05 | O |
| HETATM13512 | O | HOH | 1220 | 14.221 | 57.229 | 81.981 | 1.00 | 23.31 | O |
| HETATM13513 | O | HOH | 1221 | 10.150 | 67.011 | 25.814 | 1.00 | 23.86 | O |
| HETATM13514 | O | HOH | 1222 | 22.629 | 62.066 | 57.102 | 1.00 | 21.97 | O |
| HETATM13515 | O | HOH | 1223 | 12.815 | 66.845 | 83.665 | 1.00 | 25.16 | O |
| HETATM13516 | O | HOH | 1224 | 39.536 | 53.507 | 56.220 | 1.00 | 28.20 | O |
| HETATM13517 | O | HOH | 1225 | 31.277 | 70.286 | 53.424 | 1.00 | 27.20 | O |
| HETATM13518 | O | HOH | 1226 | 40.541 | 44.209 | 50.323 | 1.00 | 37.00 | O |
| HETATM13519 | O | HOH | 1227 | 11.221 | 42.481 | 71.213 | 1.00 | 11.57 | O |
| HETATM13520 | O | HOH | 1228 | 17.749 | 36.527 | 70.870 | 1.00 | 26.71 | O |
| HETATM13521 | O | HOH | 1229 | -2.101 | 84.129 | 28.859 | 1.00 | 23.36 | O |
| HETATM13522 | O | HOH | 1230 | 6.239 | 72.957 | 44.677 | 1.00 | 22.86 | O |
| HETATM13523 | O | HOH | 1231 | -5.275 | 42.124 | 43.598 | 1.00 | 22.12 | O |
| HETATM13524 | O | HOH | 1232 | -13.518 | 42.574 | 51.955 | 1.00 | 30.03 | O |
| HETATM13525 | O | HOH | 1233 | 15.006 | 58.849 | 46.159 | 1.00 | 21.11 | O |
| HETATM13526 | O | HOH | 1234 | 1.691 | 66.742 | 62.953 | 1.00 | 18.22 | O |
| HETATM13527 | O | HOH | 1235 | 0.541 | 69.389 | 26.643 | 1.00 | 19.47 | O |
| HETATM13528 | O | HOH | 1236 | -1.551 | 48.474 | 26.255 | 1.00 | 31.16 | O |
| HETATM13529 | O | HOH | 1237 | 10.925 | 37.837 | 75.746 | 1.00 | 18.35 | O |
| HETATM13530 | O | HOH | 1238 | -14.919 | 55.200 | 72.636 | 1.00 | 22.54 | O |
| HETATM13531 | O | HOH | 1239 | -9.424 | 58.294 | 30.883 | 1.00 | 20.67 | O |
| HETATM13532 | O | HOH | 1240 | 8.999 | 79.453 | 87.217 | 1.00 | 25.89 | O |
| HETATM13533 | O | HOH | 1241 | -8.860 | 68.658 | 67.030 | 1.00 | 21.62 | O |
| HETATM13534 | O | HOH | 1242 | 16.667 | 71.681 | 38.122 | 1.00 | 17.21 | O |
| HETATM13535 | O | HOH | 1243 | 26.701 | 79.248 | 58.611 | 1.00 | 19.65 | O |
| HETATM13536 | O | HOH | 1244 | 5.458 | 42.041 | 31.254 | 1.00 | 23.94 | O |
| HETATM13537 | O | HOH | 1245 | -13.882 | 44.013 | 36.979 | 1.00 | 28.55 | O |
| HETATM13538 | O | HOH | 1246 | -0.299 | 38.662 | 58.780 | 1.00 | 20.87 | O |
| HETATM13539 | O | HOH | 1247 | 14.069 | 32.813 | 53.233 | 1.00 | 18.20 | O |
| HETATM13540 | O | HOH | 1248 | -2.673 | 67.002 | 59.625 | 1.00 | 17.63 | O |
| HETATM13541 | O | HOH | 1249 | 19.987 | 64.414 | 54.199 | 1.00 | 25.04 | O |
| HETATM13542 | O | HOH | 1250 | 14.395 | 32.679 | 59.345 | 1.00 | 21.58 | O |
| HETATM13543 | O | HOH | 1251 | 4.290 | 31.279 | 95.654 | 1.00 | 24.46 | O |
| HETATM13544 | O | HOH | 1252 | 23.549 | 63.611 | 66.579 | 1.00 | 29.76 | O |
| HETATM13545 | O | HOH | 1253 | 2.353 | 60.040 | 15.804 | 1.00 | 28.17 | O |
| HETATM13546 | O | HOH | 1254 | 9.095 | 51.091 | 58.941 | 1.00 | 18.61 | O |
| HETATM13547 | O | HOH | 1255 | 23.618 | 35.215 | 50.742 | 1.00 | 29.47 | O |
| HETATM13548 | O | HOH | 1256 | 2.768 | 37.948 | 62.631 | 1.00 | 21.64 | O |
| HETATM13549 | O | HOH | 1257 | 23.072 | 25.771 | 67.549 | 1.00 | 26.80 | O |
| HETATM13550 | O | HOH | 1258 | 24.679 | 49.719 | 41.103 | 1.00 | 36.11 | O |
| HETATM13551 | O | HOH | 1259 | 26.963 | 65.396 | 73.640 | 1.00 | 21.53 | O |
| HETATM13552 | O | HOH | 1260 | 24.469 | 56.442 | 85.017 | 1.00 | 24.49 | O |
| HETATM13553 | O | HOH | 1261 | 31.037 | 87.841 | 76.069 | 1.00 | 19.79 | O |
| HETATM13554 | O | HOH | 1262 | 34.531 | 40.470 | 33.891 | 1.00 | 36.72 | O |
| HETATM13555 | O | HOH | 1263 | -9.823 | 81.141 | 45.513 | 1.00 | 25.14 | O |
| HETATM13556 | O | HOH | 1264 | 21.081 | 49.308 | 32.439 | 1.00 | 28.62 | O |
| HETATM13557 | O | HOH | 1265 | 6.918 | 56.589 | 20.998 | 1.00 | 38.14 | O |
| HETATM13558 | O | HOH | 1266 | 25.562 | 28.785 | 71.162 | 1.00 | 20.29 | O |
| HETATM13559 | O | HOH | 1267 | 27.659 | 64.792 | 69.718 | 1.00 | 31.38 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13560 | O | HOH | 1268 | 3.439 | 70.902 | 67.014 | 1.00 | 19.75 | O |
| HETATM13561 | O | HOH | 1269 | 25.379 | 62.861 | 69.924 | 1.00 | 21.92 | O |
| HETATM13562 | O | HOH | 1270 | 15.770 | 74.729 | 31.327 | 1.00 | 33.72 | O |
| HETATM13563 | O | HOH | 1271 | -5.414 | 69.968 | 59.832 | 1.00 | 26.98 | O |
| HETATM13564 | O | HOH | 1272 | 0.719 | 49.394 | 50.279 | 1.00 | 21.75 | O |
| HETATM13565 | O | HOH | 1273 | -7.240 | 83.270 | 35.520 | 1.00 | 40.80 | O |
| HETATM13566 | O | HOH | 1274 | -0.506 | 83.091 | 54.915 | 1.00 | 21.37 | O |
| HETATM13567 | O | HOH | 1275 | 14.225 | 95.252 | 69.988 | 1.00 | 40.85 | O |
| HETATM13568 | O | HOH | 1276 | 19.479 | 52.258 | 51.768 | 1.00 | 14.88 | O |
| HETATM13569 | O | HOH | 1277 | -4.728 | 54.818 | 34.721 | 1.00 | 21.74 | O |
| HETATM13570 | O | HOH | 1278 | 15.902 | 23.428 | 60.730 | 1.00 | 25.13 | O |
| HETATM13571 | O | HOH | 1279 | 12.475 | 51.745 | 74.537 | 1.00 | 20.09 | O |
| HETATM13572 | O | HOH | 1280 | -4.202 | 37.895 | 79.257 | 1.00 | 27.22 | O |
| HETATM13573 | O | HOH | 1281 | 34.735 | 81.912 | 81.184 | 1.00 | 29.86 | O |
| HETATM13574 | O | HOH | 1282 | 33.905 | 33.332 | 35.740 | 1.00 | 35.07 | O |
| HETATM13575 | O | HOH | 1283 | -0.078 | 49.096 | 94.024 | 1.00 | 23.77 | O |
| HETATM13576 | O | HOH | 1284 | 26.027 | 65.221 | 66.355 | 1.00 | 23.15 | O |
| HETATM13577 | O | HOH | 1285 | -12.393 | 62.909 | 40.893 | 1.00 | 26.29 | O |
| HETATM13578 | O | HOH | 1286 | -10.492 | 77.891 | 45.720 | 1.00 | 22.68 | O |
| HETATM13579 | O | HOH | 1287 | 23.864 | 24.364 | 65.372 | 1.00 | 26.27 | O |
| HETATM13580 | O | HOH | 1288 | 8.227 | 67.837 | 16.096 | 1.00 | 28.04 | O |
| HETATM13581 | O | HOH | 1289 | 14.447 | 71.039 | 52.992 | 1.00 | 26.87 | O |
| HETATM13582 | O | HOH | 1290 | 33.226 | 51.021 | 78.842 | 1.00 | 27.33 | O |
| HETATM13583 | O | HOH | 1291 | 40.617 | 61.192 | 49.417 | 1.00 | 21.78 | O |
| HETATM13584 | O | HOH | 1292 | 35.450 | 65.108 | 56.588 | 1.00 | 21.23 | O |
| HETATM13585 | O | HOH | 1293 | 19.219 | 34.080 | 71.939 | 1.00 | 29.63 | O |
| HETATM13586 | O | HOH | 1294 | 31.901 | 40.846 | 34.621 | 1.00 | 20.86 | O |
| HETATM13587 | O | HOH | 1295 | 16.106 | 66.488 | 64.549 | 1.00 | 24.06 | O |
| HETATM13588 | O | HOH | 1296 | -8.401 | 92.412 | 52.893 | 1.00 | 32.63 | O |
| HETATM13589 | O | HOH | 1297 | -6.513 | 51.622 | 54.684 | 1.00 | 26.51 | O |
| HETATM13590 | O | HOH | 1298 | 12.526 | 79.361 | 88.992 | 1.00 | 23.12 | O |
| HETATM13591 | O | HOH | 1299 | 16.638 | 43.424 | 40.959 | 1.00 | 24.62 | O |
| HETATM13592 | O | HOH | 1300 | 30.409 | 67.150 | 69.545 | 1.00 | 28.61 | O |
| HETATM13593 | O | HOH | 1301 | -3.328 | 37.519 | 86.644 | 1.00 | 18.29 | O |
| HETATM13594 | O | HOH | 1302 | -9.421 | 68.626 | 49.662 | 1.00 | 24.43 | O |
| HETATM13595 | O | HOH | 1303 | 1.051 | 90.354 | 27.755 | 1.00 | 33.01 | O |
| HETATM13596 | O | HOH | 1304 | -0.411 | 55.548 | 56.560 | 1.00 | 17.95 | O |
| HETATM13597 | O | HOH | 1305 | -15.786 | 60.459 | 82.733 | 1.00 | 30.09 | O |
| HETATM13598 | O | HOH | 1306 | 5.983 | 44.541 | 35.169 | 1.00 | 29.00 | O |
| HETATM13599 | O | HOH | 1307 | 4.411 | 104.223 | 51.419 | 1.00 | 33.21 | O |
| HETATM13600 | O | HOH | 1308 | 18.340 | 28.525 | 46.941 | 1.00 | 34.63 | O |
| HETATM13601 | O | HOH | 1309 | 26.701 | 69.535 | 73.891 | 1.00 | 18.95 | O |
| HETATM13602 | O | HOH | 1310 | 21.875 | 33.850 | 45.675 | 1.00 | 22.78 | O |
| HETATM13603 | O | HOH | 1311 | -7.140 | 51.378 | 51.430 | 1.00 | 21.67 | O |
| HETATM13604 | O | HOH | 1312 | 5.317 | 66.437 | 78.503 | 1.00 | 22.11 | O |
| HETATM13605 | O | HOH | 1313 | -1.148 | 36.134 | 58.130 | 1.00 | 16.81 | O |
| HETATM13606 | O | HOH | 1314 | -0.477 | 49.918 | 54.921 | 1.00 | 26.01 | O |
| HETATM13607 | O | HOH | 1315 | 29.256 | 91.819 | 74.746 | 1.00 | 30.87 | O |
| HETATM13608 | O | HOH | 1316 | 0.630 | 37.412 | 43.135 | 1.00 | 30.12 | O |
| HETATM13609 | O | HOH | 1317 | 4.366 | 65.263 | 62.885 | 1.00 | 18.81 | O |
| HETATM13610 | O | HOH | 1318 | 44.571 | 47.173 | 50.543 | 1.00 | 36.50 | O |
| HETATM13611 | O | HOH | 1319 | -12.126 | 70.469 | 61.331 | 1.00 | 27.26 | O |
| HETATM13612 | O | HOH | 1320 | 10.115 | 68.997 | 79.198 | 1.00 | 29.58 | O |
| HETATM13613 | O | HOH | 1321 | 12.998 | 77.114 | 68.395 | 1.00 | 23.74 | O |
| HETATM13614 | O | HOH | 1322 | 12.957 | 50.154 | 30.873 | 1.00 | 21.85 | O |
| HETATM13615 | O | HOH | 1323 | 23.450 | 80.891 | 43.208 | 1.00 | 37.16 | O |
| HETATM13616 | O | HOH | 1324 | 51.401 | 65.506 | 45.836 | 1.00 | 31.35 | O |
| HETATM13617 | O | HOH | 1325 | 22.478 | 35.631 | 44.007 | 1.00 | 22.64 | O |
| HETATM13618 | O | HOH | 1326 | -1.812 | 51.510 | 22.168 | 1.00 | 26.48 | O |
| HETATM13619 | O | HOH | 1327 | 20.535 | 85.336 | 42.874 | 1.00 | 25.61 | O |
| HETATM13620 | O | HOH | 1328 | 3.766 | 68.018 | 56.354 | 1.00 | 30.88 | O |
| HETATM13621 | O | HOH | 1329 | -5.887 | 60.795 | 55.028 | 1.00 | 29.32 | O |
| HETATM13622 | O | HOH | 1330 | 2.056 | 45.664 | 31.455 | 1.00 | 26.14 | O |
| HETATM13623 | O | HOH | 1331 | -3.196 | 62.853 | 56.261 | 1.00 | 18.54 | O |
| HETATM13624 | O | HOH | 1332 | 19.570 | 60.758 | 38.222 | 1.00 | 40.33 | O |
| HETATM13625 | O | HOH | 1333 | 25.182 | 55.210 | 35.883 | 1.00 | 37.83 | O |
| HETATM13626 | O | HOH | 1334 | 0.892 | 36.881 | 46.297 | 1.00 | 28.95 | O |
| HETATM13627 | O | HOH | 1335 | -12.960 | 52.633 | 42.582 | 1.00 | 22.19 | O |
| HETATM13628 | O | HOH | 1336 | -12.258 | 60.518 | 24.073 | 1.00 | 25.80 | O |
| HETATM13629 | O | HOH | 1337 | 40.122 | 46.103 | 45.857 | 1.00 | 19.28 | O |
| HETATM13630 | O | HOH | 1338 | -10.825 | 56.408 | 51.233 | 1.00 | 16.08 | O |
| HETATM13631 | O | HOH | 1339 | 8.726 | 78.602 | 89.862 | 1.00 | 36.02 | O |
| HETATM13632 | O | HOH | 1340 | 43.879 | 49.432 | 49.273 | 1.00 | 26.33 | O |
| HETATM13633 | O | HOH | 1341 | -11.315 | 70.097 | 48.618 | 1.00 | 23.64 | O |
| HETATM13634 | O | HOH | 1342 | -1.407 | 81.587 | 57.063 | 1.00 | 25.29 | O |
| HETATM13635 | O | HOH | 1343 | 26.770 | 75.879 | 87.845 | 1.00 | 32.95 | O |
| HETATM13636 | O | HOH | 1344 | 0.289 | 42.523 | 96.406 | 1.00 | 26.34 | O |
| HETATM13637 | O | HOH | 1345 | 41.183 | 45.753 | 48.068 | 1.00 | 17.67 | O |
| HETATM13638 | O | HOH | 1346 | 7.471 | 32.555 | 95.185 | 1.00 | 29.23 | O |
| HETATM13639 | O | HOH | 1347 | 12.451 | 78.391 | 46.267 | 1.00 | 19.52 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13640 | O | HOH | 1348 | -13.139 | 82.910 | 53.127 | 1.00 | 25.90 | O |
| HETATM13641 | O | HOH | 1349 | 34.751 | 54.936 | 65.581 | 1.00 | 23.94 | O |
| HETATM13642 | O | HOH | 1350 | 22.068 | 82.992 | 44.247 | 1.00 | 25.44 | O |
| HETATM13643 | O | HOH | 1351 | -14.436 | 69.661 | 80.273 | 1.00 | 25.75 | O |
| HETATM13644 | O | HOH | 1352 | 28.500 | 39.078 | 33.978 | 1.00 | 28.42 | O |
| HETATM13645 | O | HOH | 1353 | 6.702 | 82.423 | 57.927 | 1.00 | 22.89 | O |
| HETATM13646 | O | HOH | 1354 | 19.859 | 62.628 | 65.127 | 1.00 | 26.06 | O |
| HETATM13647 | O | HOH | 1355 | 41.322 | 59.804 | 57.704 | 1.00 | 33.85 | O |
| HETATM13648 | O | HOH | 1356 | 30.707 | 36.195 | 49.566 | 1.00 | 21.54 | O |
| HETATM13649 | O | HOH | 1357 | -4.715 | 52.376 | 50.598 | 1.00 | 16.77 | O |
| HETATM13650 | O | HOH | 1358 | 24.738 | 66.575 | 68.357 | 1.00 | 14.00 | O |
| HETATM13651 | O | HOH | 1359 | 13.417 | 57.780 | 47.886 | 1.00 | 17.71 | O |
| HETATM13652 | O | HOH | 1360 | 22.393 | 64.102 | 55.225 | 1.00 | 13.74 | O |
| HETATM13653 | O | HOH | 1361 | 6.983 | 57.250 | 50.570 | 1.00 | 16.41 | O |
| HETATM13654 | O | HOH | 1362 | 1.010 | 56.123 | 52.721 | 1.00 | 12.74 | O |
| HETATM13655 | O | HOH | 1363 | -1.909 | 48.888 | 49.526 | 1.00 | 19.18 | O |
| HETATM13656 | O | HOH | 1364 | -2.133 | 66.978 | 63.533 | 1.00 | 12.74 | O |
| HETATM13657 | O | HOH | 1365 | 5.010 | 56.242 | 51.987 | 1.00 | 9.66 | O |
| HETATM13658 | O | HOH | 1366 | 1.298 | 68.094 | 65.213 | 1.00 | 15.01 | O |
| HETATM13659 | O | HOH | 1367 | 20.614 | 66.953 | 66.262 | 1.00 | 11.19 | O |
| HETATM13660 | O | HOH | 1368 | 1.882 | 58.232 | 53.962 | 1.00 | 12.32 | O |
| HETATM13661 | O | HOH | 1369 | -5.119 | 39.432 | 69.029 | 1.00 | 23.40 | O |
| HETATM13662 | O | HOH | 1370 | 22.916 | 65.290 | 75.254 | 1.00 | 22.63 | O |
| HETATM13663 | O | HOH | 1371 | -0.623 | 65.243 | 62.552 | 1.00 | 13.01 | O |
| HETATM13664 | O | HOH | 1372 | -9.623 | 49.398 | 65.548 | 1.00 | 24.71 | O |
| HETATM13665 | O | HOH | 1373 | -8.884 | 68.508 | 64.282 | 1.00 | 21.52 | O |
| HETATM13666 | O | HOH | 1374 | 1.176 | 58.545 | 91.894 | 1.00 | 17.70 | O |
| HETATM13667 | O | HOH | 1375 | 37.385 | 64.918 | 63.728 | 1.00 | 19.42 | O |
| HETATM13668 | O | HOH | 1376 | 8.188 | 93.250 | 76.038 | 1.00 | 27.99 | O |
| HETATM13669 | O | HOH | 1377 | 27.165 | 52.670 | 79.132 | 1.00 | 21.61 | O |
| HETATM13670 | O | HOH | 1378 | 26.294 | 79.358 | 61.160 | 1.00 | 24.20 | O |
| HETATM13671 | O | HOH | 1379 | -7.272 | 58.101 | 62.261 | 1.00 | 19.52 | O |
| HETATM13672 | O | HOH | 1380 | -1.820 | 55.572 | 53.281 | 1.00 | 21.11 | O |
| HETATM13673 | O | HOH | 1381 | 33.464 | 56.761 | 56.643 | 1.00 | 16.89 | O |
| HETATM13674 | O | HOH | 1382 | -4.730 | 63.008 | 58.893 | 1.00 | 21.81 | O |
| HETATM13675 | O | HOH | 1383 | 33.633 | 87.835 | 76.180 | 1.00 | 39.00 | O |
| HETATM13676 | O | HOH | 1384 | 15.302 | 68.150 | 69.604 | 1.00 | 17.87 | O |
| HETATM13677 | O | HOH | 1385 | 22.991 | 62.951 | 59.753 | 1.00 | 24.06 | O |
| HETATM13678 | O | HOH | 1386 | 21.785 | 59.421 | 38.919 | 1.00 | 30.29 | O |
| HETATM13679 | O | HOH | 1387 | -9.859 | 81.113 | 34.461 | 1.00 | 41.65 | O |
| HETATM13680 | O | HOH | 1388 | 37.526 | 58.013 | 50.356 | 1.00 | 19.07 | O |
| HETATM13681 | O | HOH | 1389 | 15.215 | 71.280 | 50.300 | 1.00 | 27.46 | O |
| HETATM13682 | O | HOH | 1390 | 3.148 | 68.165 | 66.972 | 1.00 | 17.41 | O |
| HETATM13683 | O | HOH | 1391 | 32.516 | 29.727 | 63.600 | 1.00 | 27.68 | O |
| HETATM13684 | O | HOH | 1392 | 26.692 | 43.770 | 65.420 | 1.00 | 18.93 | O |
| HETATM13685 | O | HOH | 1393 | -18.401 | 65.113 | 70.103 | 1.00 | 28.01 | O |
| HETATM13686 | O | HOH | 1394 | -15.007 | 77.279 | 70.454 | 1.00 | 28.99 | O |
| HETATM13687 | O | HOH | 1395 | 21.713 | 67.005 | 68.659 | 1.00 | 22.34 | O |
| HETATM13688 | O | HOH | 1396 | 18.615 | 80.296 | 45.158 | 1.00 | 22.28 | O |
| HETATM13689 | O | HOH | 1397 | 26.842 | 66.811 | 59.048 | 1.00 | 27.25 | O |
| HETATM13690 | O | HOH | 1398 | -1.763 | 78.443 | 56.890 | 1.00 | 22.84 | O |
| HETATM13691 | O | HOH | 1399 | 15.679 | 70.609 | 70.424 | 1.00 | 30.93 | O |
| HETATM13692 | O | HOH | 1400 | -4.916 | 84.240 | 28.615 | 1.00 | 31.05 | O |
| HETATM13693 | O | HOH | 1401 | 6.620 | 32.653 | 51.755 | 1.00 | 21.93 | O |
| HETATM13694 | O | HOH | 1402 | -10.867 | 39.353 | 87.855 | 1.00 | 22.02 | O |
| HETATM13695 | O | HOH | 1403 | -16.029 | 58.271 | 43.183 | 1.00 | 28.83 | O |
| HETATM13696 | O | HOH | 1404 | 29.459 | 66.060 | 53.331 | 1.00 | 17.57 | O |
| HETATM13697 | O | HOH | 1405 | 19.644 | 52.034 | 34.008 | 1.00 | 41.63 | O |
| HETATM13698 | O | HOH | 1406 | 27.391 | 35.979 | 51.200 | 1.00 | 27.26 | O |
| HETATM13699 | O | HOH | 1407 | -7.820 | 66.579 | 62.862 | 1.00 | 31.49 | O |
| HETATM13700 | O | HOH | 1408 | 24.136 | 81.765 | 88.593 | 1.00 | 31.81 | O |
| HETATM13701 | O | HOH | 1409 | -8.312 | 42.423 | 61.163 | 1.00 | 25.53 | O |
| HETATM13702 | O | HOH | 1410 | -4.851 | 66.572 | 62.201 | 1.00 | 21.03 | O |
| HETATM13703 | O | HOH | 1411 | 19.953 | 61.340 | 57.133 | 1.00 | 24.05 | O |
| HETATM13704 | O | HOH | 1412 | 30.312 | 64.437 | 70.510 | 1.00 | 24.83 | O |
| HETATM13705 | O | HOH | 1413 | 25.975 | 80.449 | 43.346 | 1.00 | 28.63 | O |
| HETATM13706 | O | HOH | 1414 | 1.792 | 75.744 | 86.978 | 1.00 | 28.33 | O |
| HETATM13707 | O | HOH | 1415 | -15.591 | 43.409 | 50.531 | 1.00 | 26.70 | O |
| HETATM13708 | O | HOH | 1416 | -11.666 | 39.963 | 46.353 | 1.00 | 22.65 | O |
| HETATM13709 | O | HOH | 1417 | 10.987 | 83.352 | 35.612 | 1.00 | 37.44 | O |
| HETATM13710 | O | HOH | 1418 | -0.088 | 60.841 | 61.243 | 1.00 | 29.02 | O |
| HETATM13711 | O | HOH | 1419 | -3.848 | 53.199 | 89.164 | 1.00 | 29.28 | O |
| HETATM13712 | O | HOH | 1420 | 35.253 | 54.497 | 36.666 | 1.00 | 23.55 | O |
| HETATM13713 | O | HOH | 1421 | 26.418 | 75.813 | 37.216 | 1.00 | 28.76 | O |
| HETATM13714 | O | HOH | 1422 | 8.185 | 94.064 | 34.808 | 1.00 | 25.76 | O |
| HETATM13715 | O | HOH | 1423 | 36.154 | 58.916 | 36.139 | 1.00 | 35.66 | O |
| HETATM13716 | O | HOH | 1424 | 3.636 | 35.876 | 45.926 | 1.00 | 22.22 | O |
| HETATM13717 | O | HOH | 1425 | 14.288 | 78.644 | 21.748 | 1.00 | 38.35 | O |
| HETATM13718 | O | HOH | 1426 | -15.523 | 62.304 | 40.961 | 1.00 | 29.03 | O |
| HETATM13719 | O | HOH | 1427 | 34.168 | 54.335 | 73.791 | 1.00 | 32.50 | O |

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|---|---|---|---|---|---|---|---|---|
| HETATM13720 | O | HOH | 1428 | -12.848 | 72.416 | 82.348 | 1.00 25.80 | O |
| HETATM13721 | O | HOH | 1429 | 29.007 | 66.853 | 61.785 | 1.00 37.11 | O |
| HETATM13722 | O | HOH | 1430 | -15.955 | 64.367 | 58.651 | 1.00 34.01 | O |
| HETATM13723 | O | HOH | 1431 | -14.424 | 78.883 | 56.263 | 1.00 35.04 | O |
| HETATM13724 | O | HOH | 1432 | 0.567 | 62.407 | 55.141 | 1.00 28.39 | O |
| HETATM13725 | O | HOH | 1433 | 3.216 | 71.696 | 28.140 | 1.00 28.56 | O |
| HETATM13726 | O | HOH | 1434 | -14.001 | 53.564 | 54.623 | 1.00 30.11 | O |
| HETATM13727 | O | HOH | 1435 | -4.506 | 88.766 | 29.720 | 1.00 33.41 | O |
| HETATM13728 | O | HOH | 1436 | -14.589 | 62.007 | 54.169 | 1.00 34.99 | O |
| HETATM13729 | O | HOH | 1437 | 35.238 | 72.771 | 75.620 | 1.00 30.57 | O |
| HETATM13730 | O | HOH | 1438 | 5.969 | 73.846 | 21.448 | 1.00 23.56 | O |
| HETATM13731 | O | HOH | 1439 | -1.878 | 52.202 | 55.583 | 1.00 25.30 | O |
| HETATM13732 | O | HOH | 1440 | -6.229 | 60.598 | 60.162 | 1.00 36.31 | O |
| HETATM13733 | O | HOH | 1441 | -5.153 | 65.561 | 59.711 | 1.00 23.64 | O |
| HETATM13734 | O | HOH | 1442 | -6.546 | 77.680 | 78.239 | 1.00 29.29 | O |
| HETATM13735 | O | HOH | 1443 | 20.674 | 76.527 | 47.621 | 1.00 29.06 | O |
| HETATM13736 | O | HOH | 1444 | 17.324 | 68.325 | 56.869 | 1.00 44.16 | O |
| HETATM13737 | O | HOH | 1445 | 30.740 | 61.225 | 71.305 | 1.00 35.90 | O |
| HETATM13738 | O | HOH | 1446 | 8.026 | 69.970 | 77.782 | 1.00 24.74 | O |
| HETATM13739 | O | HOH | 1447 | 26.431 | 43.604 | 84.577 | 1.00 32.15 | O |
| HETATM13740 | O | HOH | 1448 | -11.464 | 75.610 | 44.741 | 1.00 28.63 | O |
| HETATM13741 | O | HOH | 1449 | -10.821 | 66.246 | 61.972 | 1.00 31.85 | O |
| HETATM13742 | O | HOH | 1450 | 6.731 | 71.386 | 71.256 | 1.00 18.47 | O |
| HETATM13743 | O | HOH | 1451 | 37.205 | 54.974 | 39.939 | 1.00 45.53 | O |
| HETATM13744 | O | HOH | 1452 | 9.760 | 87.203 | 29.180 | 1.00 37.31 | O |
| HETATM13745 | O | HOH | 1453 | 3.985 | 82.454 | 64.445 | 1.00 20.61 | O |
| HETATM13746 | O | HOH | 1454 | 35.058 | 48.490 | 67.848 | 1.00 30.49 | O |
| HETATM13747 | O | HOH | 1455 | 27.297 | 50.333 | 22.602 | 1.00 42.71 | O |
| HETATM13748 | O | HOH | 1456 | 10.727 | 55.068 | 20.559 | 1.00 34.13 | O |
| HETATM13749 | O | HOH | 1457 | 5.162 | 32.289 | 58.273 | 1.00 29.09 | O |
| HETATM13750 | O | HOH | 1458 | 16.901 | 26.095 | 69.875 | 1.00 30.19 | O |
| HETATM13751 | O | HOH | 1459 | 10.291 | 35.528 | 40.647 | 1.00 28.51 | O |
| HETATM13752 | O | HOH | 1460 | 29.425 | 87.835 | 78.646 | 1.00 34.94 | O |
| HETATM13753 | O | HOH | 1461 | 1.714 | 50.245 | 95.809 | 1.00 27.96 | O |
| HETATM13754 | O | HOH | 1462 | 43.505 | 30.113 | 63.305 | 1.00 28.49 | O |
| HETATM13755 | O | HOH | 1463 | 10.106 | 77.718 | 74.075 | 1.00 35.58 | O |
| HETATM13756 | O | HOH | 1464 | 42.413 | 59.111 | 55.240 | 1.00 28.62 | O |
| HETATM13757 | O | HOH | 1465 | 11.931 | 52.279 | 95.934 | 1.00 37.29 | O |
| HETATM13758 | O | HOH | 1466 | -0.818 | 69.917 | 97.042 | 1.00 35.02 | O |
| HETATM13759 | O | HOH | 1467 | 1.535 | 35.399 | 48.992 | 1.00 45.43 | O |
| HETATM13760 | O | HOH | 1468 | 6.313 | 83.778 | 47.383 | 1.00 27.56 | O |
| HETATM13761 | O | HOH | 1469 | 6.846 | 75.504 | 80.848 | 1.00 38.52 | O |
| HETATM13762 | O | HOH | 1470 | -14.479 | 61.458 | 30.906 | 1.00 27.28 | O |
| HETATM13763 | O | HOH | 1471 | 14.490 | 67.296 | 96.953 | 1.00 32.14 | O |
| HETATM13764 | O | HOH | 1472 | 26.425 | 28.622 | 48.388 | 1.00 35.30 | O |
| HETATM13765 | O | HOH | 1473 | 6.388 | 35.650 | 43.014 | 1.00 22.83 | O |
| HETATM13766 | O | HOH | 1474 | -13.236 | 50.462 | 47.478 | 1.00 30.21 | O |
| HETATM13767 | O | HOH | 1475 | -9.425 | 76.069 | 84.388 | 1.00 34.10 | O |
| HETATM13768 | O | HOH | 1476 | 13.647 | 35.757 | 37.380 | 1.00 34.65 | O |
| HETATM13769 | O | HOH | 1477 | 21.338 | 21.406 | 67.992 | 1.00 30.69 | O |
| HETATM13770 | O | HOH | 1478 | 28.227 | 51.870 | 81.595 | 1.00 33.48 | O |
| HETATM13771 | O | HOH | 1479 | 8.368 | 47.833 | 41.388 | 1.00 38.67 | O |
| HETATM13772 | O | HOH | 1480 | 12.440 | 105.826 | 54.776 | 1.00 35.54 | O |
| HETATM13773 | O | HOH | 1481 | -17.784 | 66.691 | 68.225 | 1.00 23.81 | O |
| HETATM13774 | O | HOH | 1482 | 6.200 | 34.400 | 89.136 | 1.00 24.10 | O |
| HETATM13775 | O | HOH | 1483 | 1.878 | 36.504 | 51.746 | 1.00 29.43 | O |
| HETATM13776 | O | HOH | 1484 | -15.678 | 52.090 | 33.622 | 1.00 33.82 | O |
| HETATM13777 | O | HOH | 1485 | 30.508 | 66.810 | 72.209 | 1.00 31.45 | O |
| HETATM13778 | O | HOH | 1486 | 25.862 | 70.426 | 49.939 | 1.00 22.13 | O |
| HETATM13779 | O | HOH | 1487 | -3.550 | 81.479 | 73.256 | 1.00 34.51 | O |
| HETATM13780 | O | HOH | 1488 | -10.536 | 68.703 | 59.762 | 1.00 21.98 | O |
| HETATM13781 | O | HOH | 1489 | 15.340 | 77.327 | 31.362 | 1.00 35.47 | O |
| HETATM13782 | O | HOH | 1490 | -7.092 | 67.407 | 94.527 | 1.00 36.52 | O |
| HETATM13783 | O | HOH | 1491 | -16.115 | 57.478 | 83.761 | 1.00 21.33 | O |
| HETATM13784 | O | HOH | 1492 | 5.928 | 51.222 | 36.136 | 1.00 27.51 | O |
| HETATM13785 | O | HOH | 1493 | 0.788 | 32.804 | 57.499 | 1.00 25.00 | O |
| HETATM13786 | O | HOH | 1494 | 8.797 | 52.351 | 36.160 | 1.00 37.61 | O |
| HETATM13787 | O | HOH | 1495 | 36.138 | 48.117 | 34.047 | 1.00 42.74 | O |
| HETATM13788 | O | HOH | 1496 | -8.408 | 85.146 | 63.842 | 1.00 30.46 | O |
| HETATM13789 | O | HOH | 1497 | 23.631 | 18.235 | 63.906 | 1.00 38.70 | O |
| HETATM13790 | O | HOH | 1498 | 14.339 | 80.409 | 80.102 | 1.00 48.83 | O |
| HETATM13791 | O | HOH | 1499 | -0.119 | 58.629 | 16.251 | 1.00 34.87 | O |
| HETATM13792 | O | HOH | 1500 | 15.106 | 49.775 | 86.689 | 1.00 34.17 | O |
| HETATM13793 | O | HOH | 1501 | 2.823 | 54.070 | 17.132 | 1.00 38.02 | O |
| HETATM13794 | O | HOH | 1502 | -18.779 | 67.795 | 63.653 | 1.00 47.03 | O |
| HETATM13795 | O | HOH | 1503 | -10.834 | 72.302 | 62.593 | 1.00 34.59 | O |
| HETATM13796 | O | HOH | 1504 | 8.416 | 43.642 | 35.714 | 1.00 28.31 | O |
| HETATM13797 | O | HOH | 1505 | -21.217 | 65.419 | 77.949 | 1.00 24.61 | O |
| HETATM13798 | O | HOH | 1506 | 8.134 | 43.104 | 41.930 | 1.00 32.04 | O |
| HETATM13799 | O | HOH | 1507 | 31.011 | 83.950 | 45.168 | 1.00 25.37 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13800 | O | HOH | 1508 | -1.316 | 59.936 | 101.876 | 1.00 | 35.39 | O |
| HETATM13801 | O | HOH | 1509 | 29.500 | 63.519 | 28.836 | 1.00 | 27.89 | O |
| HETATM13802 | O | HOH | 1510 | 14.839 | 70.416 | 82.219 | 1.00 | 28.14 | O |
| HETATM13803 | O | HOH | 1511 | -16.937 | 59.923 | 86.133 | 1.00 | 41.02 | O |
| HETATM13804 | O | HOH | 1512 | -2.735 | 72.511 | 80.917 | 1.00 | 29.24 | O |
| HETATM13805 | O | HOH | 1513 | -13.021 | 51.512 | 34.422 | 1.00 | 28.31 | O |
| HETATM13806 | O | HOH | 1514 | 0.110 | 72.021 | 81.630 | 1.00 | 38.20 | O |
| HETATM13807 | O | HOH | 1515 | 20.817 | 63.322 | 51.729 | 1.00 | 21.42 | O |
| HETATM13808 | O | HOH | 1516 | -19.156 | 56.074 | 69.934 | 1.00 | 32.96 | O |
| HETATM13809 | O | HOH | 1517 | -14.156 | 75.470 | 79.463 | 1.00 | 37.72 | O |
| HETATM13810 | O | HOH | 1518 | 14.726 | 80.559 | 90.478 | 1.00 | 26.90 | O |
| HETATM13811 | O | HOH | 1519 | -21.725 | 60.316 | 70.010 | 1.00 | 36.11 | O |
| HETATM13812 | O | HOH | 1520 | 22.736 | 33.011 | 72.593 | 1.00 | 35.61 | O |
| HETATM13813 | O | HOH | 1521 | 23.203 | 66.597 | 36.229 | 1.00 | 38.32 | O |
| HETATM13814 | O | HOH | 1522 | 15.625 | 72.728 | 84.795 | 1.00 | 33.54 | O |
| HETATM13815 | O | HOH | 1523 | -10.706 | 38.888 | 39.099 | 1.00 | 31.98 | O |
| HETATM13816 | O | HOH | 1524 | 14.255 | 33.688 | 89.391 | 1.00 | 36.95 | O |
| HETATM13817 | O | HOH | 1525 | 13.394 | 77.667 | 81.600 | 1.00 | 34.19 | O |
| HETATM13818 | O | HOH | 1526 | 10.651 | 47.895 | 43.118 | 1.00 | 37.12 | O |
| HETATM13819 | O | HOH | 1527 | 41.825 | 73.071 | 47.696 | 1.00 | 35.77 | O |
| HETATM13820 | O | HOH | 1528 | -1.226 | 68.712 | 82.773 | 1.00 | 34.45 | O |
| HETATM13821 | O | HOH | 1529 | 28.225 | 81.735 | 80.173 | 1.00 | 30.64 | O |
| HETATM13822 | O | HOH | 1530 | -18.575 | 61.550 | 47.802 | 1.00 | 33.73 | O |
| HETATM13823 | O | HOH | 1531 | 2.148 | 32.832 | 52.416 | 1.00 | 35.08 | O |
| HETATM13824 | O | HOH | 1532 | -19.192 | 55.756 | 81.749 | 1.00 | 28.08 | O |
| HETATM13825 | O | HOH | 1533 | 23.799 | 57.800 | 36.509 | 1.00 | 40.51 | O |
| HETATM13826 | O | HOH | 1534 | 37.253 | 78.713 | 70.637 | 1.00 | 35.31 | O |
| HETATM13827 | O | HOH | 1535 | 5.347 | 93.956 | 57.409 | 1.00 | 35.82 | O |
| HETATM13828 | O | HOH | 1536 | 16.074 | 76.002 | 24.009 | 1.00 | 28.03 | O |
| HETATM13829 | O | HOH | 1537 | -10.283 | 75.141 | 93.875 | 1.00 | 32.58 | O |
| HETATM13830 | O | HOH | 1538 | 37.199 | 68.412 | 73.059 | 1.00 | 34.67 | O |
| HETATM13831 | O | HOH | 1539 | 4.680 | 92.817 | 22.194 | 1.00 | 35.46 | O |
| HETATM13832 | O | HOH | 1540 | 0.363 | 96.519 | 46.437 | 1.00 | 39.74 | O |
| HETATM13833 | O | HOH | 1541 | 35.964 | 52.265 | 34.805 | 1.00 | 26.13 | O |
| HETATM13834 | O | HOH | 1542 | 17.961 | 102.373 | 58.832 | 1.00 | 35.50 | O |
| HETATM13835 | O | HOH | 1543 | 3.380 | 93.884 | 59.067 | 1.00 | 38.64 | O |
| HETATM13836 | O | HOH | 1544 | 10.272 | 91.652 | 48.816 | 1.00 | 29.59 | O |
| HETATM13837 | O | HOH | 1545 | 1.405 | 92.302 | 20.848 | 1.00 | 30.87 | O |
| HETATM13838 | O | HOH | 1546 | -0.999 | 32.799 | 63.842 | 1.00 | 37.45 | O |
| HETATM13839 | O | HOH | 1547 | 29.143 | 78.233 | 59.171 | 1.00 | 31.70 | O |
| HETATM13840 | O | HOH | 1548 | 39.923 | 85.042 | 58.054 | 1.00 | 43.74 | O |
| HETATM13841 | O | HOH | 1549 | -4.664 | 42.016 | 36.006 | 1.00 | 30.08 | O |
| HETATM13842 | O | HOH | 1550 | 9.435 | 94.144 | 29.492 | 1.00 | 43.31 | O |
| HETATM13843 | O | HOH | 1551 | 37.333 | 43.661 | 34.151 | 1.00 | 42.90 | O |
| HETATM13844 | O | HOH | 1552 | 20.624 | 42.888 | 21.694 | 1.00 | 36.80 | O |
| HETATM13845 | O | HOH | 1553 | 11.257 | 94.773 | 69.738 | 1.00 | 43.47 | O |
| HETATM13846 | O | HOH | 1554 | 36.489 | 70.519 | 74.945 | 1.00 | 38.24 | O |
| HETATM13847 | O | HOH | 1555 | -9.296 | 93.462 | 59.712 | 1.00 | 46.06 | O |
| HETATM13848 | O | HOH | 1556 | 13.705 | 33.382 | 84.382 | 1.00 | 34.02 | O |
| HETATM13849 | O | HOH | 1557 | 28.800 | 46.763 | 22.839 | 1.00 | 45.66 | O |
| HETATM13850 | O | HOH | 1558 | -9.870 | 42.750 | 34.373 | 1.00 | 38.89 | O |
| HETATM13851 | O | HOH | 1559 | -5.806 | 36.844 | 60.841 | 1.00 | 29.70 | O |
| HETATM13852 | O | HOH | 1560 | 40.055 | 63.121 | 35.558 | 1.00 | 39.79 | O |
| HETATM13853 | O | HOH | 1561 | -20.527 | 70.194 | 39.005 | 1.00 | 46.36 | O |
| HETATM13854 | O | HOH | 1562 | 13.781 | 47.268 | 29.614 | 1.00 | 40.26 | O |
| HETATM13855 | O | HOH | 1563 | 52.192 | 62.550 | 46.324 | 1.00 | 48.33 | O |
| HETATM13856 | O | HOH | 1564 | 21.675 | 60.642 | 90.091 | 1.00 | 37.36 | O |
| HETATM13857 | O | HOH | 1565 | 28.945 | 56.068 | 29.342 | 1.00 | 39.28 | O |
| HETATM13858 | O | HOH | 1566 | -26.201 | 59.791 | 78.130 | 1.00 | 40.62 | O |
| HETATM13859 | O | HOH | 1567 | 20.957 | 52.989 | 75.813 | 1.00 | 19.44 | O |
| HETATM13860 | O | HOH | 1568 | 24.495 | 27.593 | 35.101 | 1.00 | 40.57 | O |
| HETATM13861 | O | HOH | 1569 | -8.820 | 50.538 | 25.520 | 1.00 | 48.64 | O |
| HETATM13862 | O | HOH | 1570 | -17.825 | 57.518 | 66.419 | 1.00 | 31.65 | O |
| HETATM13863 | O | HOH | 1571 | 31.095 | 97.843 | 58.307 | 1.00 | 38.63 | O |
| HETATM13864 | O | HOH | 1572 | 31.998 | 91.621 | 73.806 | 1.00 | 29.74 | O |
| HETATM13865 | O | HOH | 1573 | 9.980 | 28.861 | 70.814 | 1.00 | 27.08 | O |
| HETATM13866 | O | HOH | 1574 | -2.184 | 77.350 | 83.670 | 1.00 | 39.89 | O |
| HETATM13867 | O | HOH | 1575 | 43.874 | 55.128 | 40.476 | 1.00 | 34.88 | O |
| HETATM13868 | O | HOH | 1576 | 7.740 | 34.288 | 86.925 | 1.00 | 51.07 | O |
| HETATM13869 | O | HOH | 1577 | 25.040 | 66.421 | 26.327 | 1.00 | 43.91 | O |
| HETATM13870 | O | HOH | 1578 | -20.964 | 68.475 | 80.609 | 1.00 | 39.51 | O |
| HETATM13871 | O | HOH | 1579 | -14.361 | 49.427 | 86.932 | 1.00 | 37.94 | O |
| HETATM13872 | O | HOH | 1580 | 33.851 | 29.250 | 67.635 | 1.00 | 35.14 | O |
| HETATM13873 | O | HOH | 1581 | -11.387 | 89.292 | 54.924 | 1.00 | 39.85 | O |
| HETATM13874 | O | HOH | 1582 | 42.514 | 32.667 | 51.891 | 1.00 | 45.87 | O |
| HETATM13875 | O | HOH | 1583 | 8.056 | 22.847 | 56.061 | 1.00 | 40.11 | O |
| HETATM13876 | O | HOH | 1584 | 45.131 | 42.240 | 45.398 | 1.00 | 36.43 | O |
| HETATM13877 | O | HOH | 1585 | 40.779 | 71.287 | 40.930 | 1.00 | 44.82 | O |
| HETATM13878 | O | HOH | 1586 | 9.686 | 52.698 | 65.928 | 1.00 | 33.35 | O |
| HETATM13879 | O | HOH | 1587 | 36.742 | 63.172 | 34.808 | 1.00 | 35.10 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM13880 | O | HOH | 1588 | -0.107 | 51.743 | 88.490 | 1.00 | 29.71 | O |
| HETATM13881 | O | HOH | 1589 | 32.983 | 82.920 | 68.645 | 1.00 | 41.34 | O |
| HETATM13882 | O | HOH | 1590 | 17.755 | 47.727 | 26.804 | 1.00 | 25.29 | O |
| HETATM13883 | O | HOH | 1591 | 28.210 | 29.409 | 36.875 | 1.00 | 40.83 | O |
| HETATM13884 | O | HOH | 1592 | -11.861 | 48.865 | 31.753 | 1.00 | 33.81 | O |
| HETATM13885 | O | HOH | 1593 | 38.419 | 62.710 | 78.925 | 1.00 | 30.50 | O |
| HETATM13886 | O | HOH | 1594 | 40.337 | 31.297 | 60.730 | 1.00 | 36.85 | O |
| HETATM13887 | O | HOH | 1595 | 13.068 | 40.856 | 99.445 | 1.00 | 34.63 | O |
| HETATM13888 | O | HOH | 1596 | 22.689 | 28.359 | 40.960 | 1.00 | 38.11 | O |
| HETATM13889 | O | HOH | 1597 | -5.163 | 46.860 | 56.277 | 1.00 | 45.44 | O |
| HETATM13890 | O | HOH | 1598 | -7.816 | 55.538 | 102.287 | 1.00 | 46.09 | O |
| HETATM13891 | O | HOH | 1599 | 32.630 | 73.168 | 44.241 | 1.00 | 27.16 | O |
| HETATM13892 | O | HOH | 1600 | 30.547 | 44.030 | 78.719 | 1.00 | 32.34 | O |
| HETATM13893 | O | HOH | 1601 | 19.435 | 67.819 | 60.494 | 1.00 | 35.87 | O |
| HETATM13894 | O | HOH | 1602 | 16.615 | 58.891 | 40.294 | 1.00 | 28.04 | O |
| HETATM13895 | O | HOH | 1603 | 31.240 | 69.875 | 48.418 | 1.00 | 36.14 | O |
| HETATM13896 | O | HOH | 1604 | 2.711 | 81.451 | 98.522 | 1.00 | 33.95 | O |
| HETATM13897 | O | HOH | 1605 | -23.029 | 44.210 | 46.806 | 1.00 | 31.46 | O |
| HETATM13898 | O | HOH | 1606 | 10.830 | 65.207 | 62.739 | 1.00 | 36.64 | O |
| HETATM13899 | O | HOH | 1607 | 13.759 | 65.598 | 61.396 | 1.00 | 49.81 | O |
| HETATM13900 | O | HOH | 1608 | 39.872 | 74.867 | 46.902 | 1.00 | 35.41 | O |
| HETATM13901 | O | HOH | 1609 | 3.175 | 58.172 | 14.165 | 1.00 | 37.81 | O |
| HETATM13902 | O | HOH | 1610 | -14.197 | 43.809 | 57.241 | 1.00 | 41.71 | O |
| HETATM13903 | O | HOH | 1611 | -23.167 | 64.021 | 78.624 | 1.00 | 32.43 | O |
| HETATM13904 | O | HOH | 1612 | -10.738 | 84.761 | 68.965 | 1.00 | 30.24 | O |
| HETATM13905 | O | HOH | 1613 | -17.528 | 48.978 | 66.629 | 1.00 | 41.53 | O |
| HETATM13906 | O | HOH | 1614 | -20.683 | 77.493 | 66.342 | 1.00 | 32.29 | O |
| HETATM13907 | O | HOH | 1615 | 17.869 | 62.719 | 55.877 | 1.00 | 24.09 | O |
| HETATM13908 | O | HOH | 1616 | -13.507 | 68.819 | 92.515 | 1.00 | 28.05 | O |
| HETATM13909 | O | HOH | 1617 | 5.332 | 56.769 | 61.058 | 1.00 | 28.76 | O |
| HETATM13910 | O | HOH | 1618 | 37.160 | 53.981 | 75.932 | 1.00 | 57.41 | O |
| HETATM13911 | O | HOH | 1619 | 33.633 | 47.868 | 70.159 | 1.00 | 37.32 | O |
| HETATM13912 | O | HOH | 1620 | 6.558 | 72.295 | 28.506 | 1.00 | 35.97 | O |
| HETATM13913 | O | HOH | 1621 | -13.461 | 48.468 | 34.205 | 1.00 | 32.10 | O |
| HETATM13914 | O | HOH | 1622 | 32.799 | 79.656 | 46.619 | 1.00 | 31.07 | O |
| HETATM13915 | O | HOH | 1623 | 26.058 | 66.172 | 63.724 | 1.00 | 37.29 | O |
| HETATM13916 | O | HOH | 1624 | 29.231 | 32.366 | 78.433 | 1.00 | 42.01 | O |
| HETATM13917 | O | HOH | 1625 | 24.887 | 68.428 | 60.747 | 1.00 | 23.11 | O |
| HETATM13918 | O | HOH | 1626 | 33.006 | 57.155 | 88.784 | 1.00 | 43.79 | O |
| HETATM13919 | O | HOH | 1627 | -7.898 | 62.007 | 100.122 | 1.00 | 26.84 | O |
| HETATM13920 | O | HOH | 1628 | 50.036 | 57.718 | 55.064 | 1.00 | 42.90 | O |
| HETATM13921 | O | HOH | 1629 | -13.804 | 47.117 | 59.823 | 1.00 | 39.51 | O |
| HETATM13922 | O | HOH | 1630 | -20.508 | 74.690 | 60.753 | 1.00 | 34.10 | O |
| HETATM13923 | O | HOH | 1631 | -20.105 | 44.571 | 34.921 | 1.00 | 37.06 | O |
| HETATM13924 | O | HOH | 1632 | 51.830 | 54.522 | 44.530 | 1.00 | 35.55 | O |
| HETATM13925 | O | HOH | 1633 | 25.935 | 69.840 | 52.630 | 1.00 | 34.29 | O |
| HETATM13926 | O | HOH | 1634 | 27.748 | 24.553 | 69.462 | 1.00 | 40.55 | O |
| HETATM13927 | O | HOH | 1635 | 38.646 | 66.521 | 69.406 | 1.00 | 44.70 | O |
| HETATM13928 | O | HOH | 1636 | 16.876 | 98.792 | 86.734 | 1.00 | 33.92 | O |
| HETATM13929 | O | HOH | 1637 | 12.331 | 71.115 | 25.987 | 1.00 | 37.60 | O |
| HETATM13930 | O | HOH | 1638 | 7.817 | 47.331 | 38.116 | 1.00 | 27.70 | O |
| HETATM13931 | O | HOH | 1639 | 8.060 | 38.065 | 29.485 | 1.00 | 45.52 | O |
| HETATM13932 | O | HOH | 1640 | 29.819 | 59.975 | 73.928 | 1.00 | 30.95 | O |
| HETATM13933 | O | HOH | 1641 | -16.007 | 57.413 | 55.571 | 1.00 | 33.15 | O |
| HETATM13934 | O | HOH | 1642 | 9.543 | 46.041 | 35.065 | 1.00 | 29.18 | O |
| HETATM13935 | O | HOH | 1643 | 13.426 | 31.461 | 82.301 | 1.00 | 34.86 | O |
| HETATM13936 | O | HOH | 1644 | 22.175 | 29.614 | 75.234 | 1.00 | 35.56 | O |
| HETATM13937 | O | HOH | 1645 | -12.739 | 73.144 | 24.637 | 1.00 | 44.84 | O |
| HETATM13938 | O | HOH | 1646 | 39.486 | 68.433 | 53.213 | 1.00 | 37.66 | O |
| HETATM13939 | O | HOH | 1647 | 4.162 | 80.403 | 92.358 | 1.00 | 36.25 | O |
| HETATM13940 | O | HOH | 1648 | 35.269 | 85.370 | 83.562 | 1.00 | 43.16 | O |
| HETATM13941 | O | HOH | 1649 | 1.158 | 80.587 | 74.842 | 1.00 | 33.11 | O |
| HETATM13942 | O | HOH | 1650 | 9.784 | 77.471 | 81.106 | 1.00 | 39.66 | O |
| HETATM13943 | O | HOH | 1651 | 5.239 | 88.791 | 96.457 | 1.00 | 29.97 | O |
| HETATM13944 | O | HOH | 1652 | 24.077 | 25.827 | 73.646 | 1.00 | 36.22 | O |
| HETATM13945 | O | HOH | 1653 | -12.546 | 76.878 | 26.186 | 1.00 | 35.23 | O |
| HETATM13946 | O | HOH | 1654 | 43.631 | 59.671 | 40.486 | 1.00 | 39.80 | O |
| HETATM13947 | O | HOH | 1655 | 18.649 | 31.232 | 45.482 | 1.00 | 41.85 | O |
| HETATM13948 | O | HOH | 1656 | 13.728 | 92.192 | 87.532 | 1.00 | 37.44 | O |
| HETATM13949 | O | HOH | 1657 | 27.691 | 81.533 | 41.289 | 1.00 | 40.26 | O |
| HETATM13950 | O | HOH | 1658 | 7.835 | 69.140 | 107.034 | 1.00 | 36.67 | O |
| HETATM13951 | O | HOH | 1659 | -2.597 | 88.355 | 96.927 | 1.00 | 45.22 | O |
| HETATM13952 | O | HOH | 1660 | -16.364 | 78.866 | 53.461 | 1.00 | 41.04 | O |
| HETATM13953 | O | HOH | 1661 | -10.156 | 73.824 | 57.654 | 1.00 | 39.27 | O |
| HETATM13954 | O | HOH | 1662 | 13.532 | 73.342 | 54.353 | 1.00 | 45.73 | O |
| HETATM13955 | O | HOH | 1663 | 33.306 | 37.820 | 31.382 | 1.00 | 37.08 | O |
| HETATM13956 | O | HOH | 1664 | 12.276 | 53.776 | 36.213 | 1.00 | 32.86 | O |
| HETATM13957 | O | HOH | 1665 | 41.183 | 67.958 | 70.763 | 1.00 | 38.92 | O |
| HETATM13958 | O | HOH | 1666 | 16.455 | 90.992 | 87.750 | 1.00 | 36.95 | O |
| HETATM13959 | O | HOH | 1667 | 12.540 | 96.760 | 49.313 | 1.00 | 42.90 | O |

| HETATM13960 | O | HOH | 1668 | 13.643 | 73.384 | 87.732 | 1.00 42.66 | O |
|---|---|---|---|---|---|---|---|---|
| HETATM13961 | O | HOH | 1669 | -12.263 | 32.723 | 88.126 | 1.00 43.91 | O |
| HETATM13962 | O | HOH | 1670 | 14.038 | 50.586 | 33.458 | 1.00 36.95 | O |
| HETATM13963 | O | HOH | 1671 | 31.184 | 64.382 | 73.475 | 1.00 38.37 | O |
| HETATM13964 | O | HOH | 1672 | -0.717 | 76.319 | 75.934 | 1.00 36.75 | O |
| HETATM13965 | O | HOH | 1673 | 12.708 | 71.793 | 102.727 | 1.00 45.44 | O |
| HETATM13966 | O | HOH | 1674 | 24.582 | 64.120 | 89.329 | 1.00 38.46 | O |
| HETATM13967 | O | HOH | 1675 | -4.139 | 39.310 | 38.742 | 1.00 43.14 | O |
| HETATM13968 | O | HOH | 1676 | -15.798 | 82.563 | 42.014 | 1.00 41.63 | O |
| HETATM13969 | O | HOH | 1677 | 13.261 | 34.622 | 39.809 | 1.00 41.70 | O |
| HETATM13970 | O | HOH | 1678 | -2.040 | 67.238 | 14.221 | 1.00 47.09 | O |
| HETATM13971 | O | HOH | 1679 | 16.534 | 37.782 | 50.915 | 1.00 34.01 | O |
| HETATM13972 | O | HOH | 1680 | 10.171 | 55.181 | 85.804 | 1.00 37.43 | O |
| HETATM13973 | O | HOH | 1681 | 12.833 | 72.309 | 33.292 | 1.00 38.60 | O |
| HETATM13974 | O | HOH | 1682 | 5.260 | 89.537 | 67.683 | 1.00 38.73 | O |
| HETATM13975 | O | HOH | 1683 | 5.542 | 63.146 | 36.133 | 1.00 19.76 | O |
| HETATM13976 | O | HOH | 1684 | 27.787 | 67.531 | 72.292 | 1.00 23.78 | O |
| HETATM13977 | O | HOH | 1685 | -15.202 | 59.375 | 84.620 | 1.00 25.82 | O |
| HETATM13978 | O | HOH | 1686 | -0.767 | 65.232 | 59.927 | 1.00 30.96 | O |
| HETATM13979 | O | HOH | 1687 | 25.714 | 44.137 | 29.533 | 1.00 22.54 | O |
| HETATM13980 | O | HOH | 1688 | 36.497 | 55.577 | 50.274 | 1.00 30.61 | O |
| HETATM13981 | O | HOH | 1689 | -8.217 | 72.517 | 65.645 | 1.00 26.65 | O |
| HETATM13982 | O | HOH | 1690 | 32.763 | 67.955 | 51.484 | 1.00 33.76 | O |
| HETATM13983 | O | HOH | 1691 | -8.180 | 57.329 | 40.078 | 1.00 28.88 | O |
| HETATM13984 | O | HOH | 1692 | 31.016 | 65.789 | 51.164 | 1.00 34.96 | O |
| HETATM13985 | O | HOH | 1693 | 0.487 | 61.168 | 81.084 | 1.00 21.34 | O |
| HETATM13986 | O | HOH | 1694 | -4.346 | 53.061 | 54.401 | 1.00 28.87 | O |
| HETATM13987 | O | HOH | 1695 | 13.148 | 50.939 | 88.342 | 1.00 33.49 | O |
| HETATM13988 | O | HOH | 1696 | 17.941 | 66.928 | 69.281 | 1.00 23.52 | O |
| HETATM13989 | O | HOH | 1697 | 25.108 | 36.606 | 44.157 | 1.00 25.91 | O |
| HETATM13990 | O | HOH | 1698 | 0.903 | 57.837 | 56.369 | 1.00 24.39 | O |
| HETATM13991 | O | HOH | 1699 | 23.519 | 36.047 | 36.868 | 1.00 26.58 | O |
| HETATM13992 | O | HOH | 1700 | 19.032 | 61.497 | 50.889 | 1.00 20.97 | O |
| HETATM13993 | O | HOH | 1701 | 7.046 | 72.010 | 74.114 | 1.00 22.61 | O |
| HETATM13994 | O | HOH | 1702 | -11.467 | 68.567 | 63.016 | 1.00 25.98 | O |
| HETATM13995 | O | HOH | 1703 | 12.248 | 62.263 | 77.054 | 1.00 27.36 | O |
| HETATM13996 | O | HOH | 1704 | 29.075 | 67.106 | 47.112 | 1.00 34.93 | O |
| HETATM13997 | O | HOH | 1705 | -6.139 | 83.789 | 63.821 | 1.00 31.16 | O |
| HETATM13998 | O | HOH | 1706 | 24.329 | 64.655 | 53.325 | 1.00 33.22 | O |
| HETATM13999 | O | HOH | 1707 | -13.696 | 59.302 | 32.435 | 1.00 28.51 | O |
| HETATM14000 | O | HOH | 1708 | 40.483 | 48.634 | 46.061 | 1.00 31.35 | O |
| HETATM14001 | O | HOH | 1709 | -7.849 | 102.218 | 45.278 | 1.00 37.06 | O |
| HETATM14002 | O | HOH | 1710 | 9.344 | 59.024 | 67.039 | 1.00 26.73 | O |
| HETATM14003 | O | HOH | 1711 | 26.443 | 24.319 | 66.062 | 1.00 31.41 | O |
| HETATM14004 | O | HOH | 1712 | -15.048 | 54.973 | 83.649 | 1.00 31.84 | O |
| HETATM14005 | O | HOH | 1713 | 24.742 | 79.759 | 86.719 | 1.00 28.59 | O |
| HETATM14006 | O | HOH | 1714 | 2.040 | 84.512 | 65.738 | 1.00 31.68 | O |
| HETATM14007 | O | HOH | 1715 | 10.864 | 59.007 | 20.313 | 1.00 29.01 | O |
| HETATM14008 | O | HOH | 1716 | 29.501 | 79.553 | 73.955 | 1.00 31.95 | O |
| HETATM14009 | O | HOH | 1717 | 3.600 | 74.300 | 22.952 | 1.00 29.87 | O |
| HETATM14010 | O | HOH | 1718 | 4.957 | 74.339 | 100.462 | 1.00 40.40 | O |
| HETATM14011 | O | HOH | 1719 | 9.963 | 35.839 | 77.138 | 1.00 26.85 | O |
| HETATM14012 | O | HOH | 1720 | 3.300 | 54.941 | 22.072 | 1.00 25.53 | O |
| HETATM14013 | O | HOH | 1721 | 3.225 | 52.684 | 89.028 | 1.00 28.55 | O |
| HETATM14014 | O | HOH | 1722 | 8.992 | 53.181 | 60.664 | 1.00 28.71 | O |
| HETATM14015 | O | HOH | 1723 | -2.284 | 47.983 | 32.363 | 1.00 31.58 | O |
| HETATM14016 | O | HOH | 1724 | 2.900 | 31.311 | 57.397 | 1.00 26.06 | O |
| HETATM14017 | O | HOH | 1725 | -13.132 | 61.888 | 73.810 | 1.00 30.80 | O |
| HETATM14018 | O | HOH | 1726 | 5.768 | 88.159 | 42.945 | 1.00 26.41 | O |
| HETATM14019 | O | HOH | 1727 | 26.917 | 65.360 | 54.112 | 1.00 32.37 | O |
| HETATM14020 | O | HOH | 1728 | -13.787 | 49.142 | 49.634 | 1.00 49.19 | O |
| HETATM14021 | O | HOH | 1729 | 24.138 | 68.282 | 55.382 | 1.00 34.01 | O |
| HETATM14022 | O | HOH | 1730 | 16.138 | 36.715 | 38.222 | 1.00 30.63 | O |
| HETATM14023 | O | HOH | 1731 | 16.909 | 70.774 | 56.799 | 1.00 40.85 | O |
| HETATM14024 | O | HOH | 1732 | -18.805 | 57.893 | 80.159 | 1.00 35.25 | O |
| HETATM14025 | O | HOH | 1733 | -4.926 | 84.764 | 53.459 | 1.00 33.70 | O |
| HETATM14026 | O | HOH | 1734 | -6.558 | 87.818 | 73.505 | 1.00 40.73 | O |
| HETATM14027 | O | HOH | 1735 | 8.433 | 35.197 | 79.301 | 1.00 26.12 | O |
| HETATM14028 | O | HOH | 1736 | 0.171 | 44.922 | 73.639 | 1.00 24.24 | O |
| HETATM14029 | O | HOH | 1737 | -6.662 | 42.096 | 68.683 | 1.00 27.80 | O |
| HETATM14030 | O | HOH | 1738 | 7.248 | 94.766 | 74.123 | 1.00 31.50 | O |
| HETATM14031 | O | HOH | 1739 | 15.781 | 75.569 | 85.164 | 1.00 29.41 | O |
| HETATM14032 | O | HOH | 1740 | -13.009 | 62.364 | 62.346 | 1.00 27.90 | O |
| HETATM14033 | O | HOH | 1741 | 19.504 | 33.486 | 46.809 | 1.00 32.17 | O |
| HETATM14034 | O | HOH | 1742 | 17.359 | 95.507 | 72.481 | 1.00 31.31 | O |
| HETATM14035 | O | HOH | 1743 | 4.198 | 33.136 | 50.912 | 1.00 37.60 | O |
| HETATM14036 | O | HOH | 1744 | 4.611 | 84.122 | 77.942 | 1.00 34.30 | O |
| HETATM14037 | O | HOH | 1745 | -14.138 | 67.822 | 89.645 | 1.00 26.78 | O |
| HETATM14038 | O | HOH | 1746 | -5.423 | 43.237 | 100.065 | 1.00 41.52 | O |
| HETATM14039 | O | HOH | 1747 | 31.425 | 77.662 | 74.136 | 1.00 29.33 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM14040 | O | HOH | 1748 | -19.062 | 58.518 | 68.886 | 1.00 | 33.71 | O |
| HETATM14041 | O | HOH | 1749 | 27.099 | 88.470 | 51.367 | 1.00 | 38.29 | O |
| HETATM14042 | O | HOH | 1750 | 18.208 | 25.874 | 61.354 | 1.00 | 33.26 | O |
| HETATM14043 | O | HOH | 1751 | -7.331 | 49.231 | 53.089 | 1.00 | 31.78 | O |
| HETATM14044 | O | HOH | 1752 | 34.837 | 75.883 | 76.104 | 1.00 | 30.55 | O |
| HETATM14045 | O | HOH | 1753 | 28.974 | 68.690 | 53.558 | 1.00 | 31.32 | O |
| HETATM14046 | O | HOH | 1754 | 18.306 | 62.420 | 63.039 | 1.00 | 40.50 | O |
| HETATM14047 | O | HOH | 1755 | 3.653 | 90.148 | 28.282 | 1.00 | 33.51 | O |
| HETATM14048 | O | HOH | 1756 | 28.552 | 85.391 | 79.133 | 1.00 | 45.29 | O |
| HETATM14049 | O | HOH | 1757 | 3.903 | 33.181 | 89.112 | 1.00 | 40.08 | O |
| HETATM14050 | O | HOH | 1758 | 24.343 | 47.916 | 77.840 | 1.00 | 34.78 | O |
| HETATM14051 | O | HOH | 1759 | 22.582 | 66.408 | 56.821 | 1.00 | 29.10 | O |
| HETATM14052 | O | HOH | 1760 | 0.449 | 66.279 | 97.580 | 1.00 | 32.37 | O |
| HETATM14053 | O | HOH | 1761 | 21.014 | 76.855 | 93.425 | 1.00 | 42.73 | O |
| HETATM14054 | O | HOH | 1762 | 35.380 | 52.499 | 44.030 | 1.00 | 30.55 | O |
| HETATM14055 | O | HOH | 1763 | 10.100 | 69.668 | 25.464 | 1.00 | 34.64 | O |
| HETATM14056 | O | HOH | 1764 | -8.313 | 68.509 | 99.123 | 1.00 | 38.12 | O |
| HETATM14057 | O | HOH | 1765 | -0.949 | 33.608 | 86.151 | 1.00 | 34.38 | O |
| HETATM14058 | O | HOH | 1766 | 15.015 | 57.422 | 66.955 | 1.00 | 30.28 | O |
| HETATM14059 | O | HOH | 1767 | 26.662 | 104.076 | 63.568 | 1.00 | 37.18 | O |
| HETATM14060 | O | HOH | 1768 | 25.527 | 63.719 | 28.361 | 1.00 | 43.64 | O |
| HETATM14061 | O | HOH | 1769 | 7.731 | 92.737 | 83.170 | 1.00 | 34.97 | O |
| HETATM14062 | O | HOH | 1770 | -19.400 | 56.413 | 88.538 | 1.00 | 44.83 | O |
| HETATM14063 | O | HOH | 1771 | -13.578 | 76.711 | 52.526 | 1.00 | 38.83 | O |
| HETATM14064 | O | HOH | 1772 | 1.300 | 69.687 | 82.566 | 1.00 | 44.67 | O |
| HETATM14065 | O | HOH | 1773 | 7.163 | 39.950 | 31.209 | 1.00 | 41.94 | O |
| HETATM14066 | O | HOH | 1774 | 19.983 | 30.747 | 72.647 | 1.00 | 38.61 | O |
| HETATM14067 | O | HOH | 1775 | 37.409 | 69.947 | 57.382 | 1.00 | 32.97 | O |
| HETATM14068 | O | HOH | 1776 | 10.916 | 85.759 | 91.178 | 1.00 | 36.78 | O |
| HETATM14069 | O | HOH | 1777 | 41.199 | 48.440 | 48.722 | 1.00 | 35.12 | O |
| HETATM14070 | O | HOH | 1778 | -6.881 | 60.719 | 57.505 | 1.00 | 38.99 | O |
| HETATM14071 | O | HOH | 1779 | 11.390 | 34.932 | 29.784 | 1.00 | 37.54 | O |
| HETATM14072 | O | HOH | 1780 | 21.895 | 64.991 | 64.868 | 1.00 | 31.80 | O |
| HETATM14073 | O | HOH | 1781 | 3.249 | 66.088 | 58.430 | 1.00 | 36.50 | O |
| HETATM14074 | O | HOH | 1782 | 20.592 | 103.041 | 58.822 | 1.00 | 46.43 | O |
| HETATM14075 | O | HOH | 1783 | 7.616 | 55.715 | 92.302 | 1.00 | 31.51 | O |
| HETATM14076 | O | HOH | 1784 | 30.225 | 74.252 | 49.827 | 1.00 | 39.32 | O |
| HETATM14077 | O | HOH | 1785 | 24.612 | 62.214 | 72.371 | 1.00 | 33.63 | O |
| HETATM14078 | O | HOH | 1786 | -3.876 | 102.259 | 46.228 | 1.00 | 38.52 | O |
| HETATM14079 | O | HOH | 1787 | 24.230 | 88.505 | 87.406 | 1.00 | 40.03 | O |
| HETATM14080 | O | HOH | 1788 | -22.223 | 72.642 | 61.434 | 1.00 | 43.18 | O |
| HETATM14081 | O | HOH | 1789 | 2.564 | 29.467 | 62.628 | 1.00 | 38.60 | O |
| HETATM14082 | O | HOH | 1790 | -18.414 | 65.737 | 61.906 | 1.00 | 32.73 | O |
| HETATM14083 | O | HOH | 1791 | 24.647 | 91.807 | 57.048 | 1.00 | 38.30 | O |
| HETATM14084 | O | HOH | 1792 | 11.082 | 94.301 | 48.115 | 1.00 | 37.64 | O |
| HETATM14085 | O | HOH | 1793 | 1.909 | 89.977 | 92.157 | 1.00 | 43.30 | O |
| HETATM14086 | O | HOH | 1794 | -15.584 | 54.903 | 56.301 | 1.00 | 44.18 | O |
| HETATM14087 | O | HOH | 1795 | 2.383 | 63.224 | 56.909 | 1.00 | 39.16 | O |
| HETATM14088 | O | HOH | 1796 | 6.169 | 26.716 | 53.089 | 1.00 | 44.92 | O |
| HETATM14089 | O | HOH | 1797 | 3.369 | 86.588 | 19.264 | 1.00 | 33.92 | O |
| HETATM14090 | O | HOH | 1798 | 8.486 | 93.113 | 85.693 | 1.00 | 39.83 | O |
| HETATM14091 | O | HOH | 1799 | 19.832 | 35.115 | 81.575 | 1.00 | 32.42 | O |
| HETATM14092 | O | HOH | 1800 | -12.400 | 45.155 | 97.960 | 1.00 | 40.58 | O |
| HETATM14093 | O | HOH | 1801 | 5.370 | 42.603 | 59.768 | 1.00 | 28.41 | O |
| HETATM14094 | O | HOH | 1802 | 9.934 | 105.050 | 55.149 | 1.00 | 38.31 | O |
| HETATM14095 | O | HOH | 1803 | 25.564 | 81.860 | 79.699 | 1.00 | 30.43 | O |
| HETATM14096 | O | HOH | 1804 | 11.364 | 72.647 | 60.847 | 1.00 | 30.28 | O |
| HETATM14097 | O | HOH | 1805 | 15.307 | 60.984 | 31.810 | 1.00 | 42.72 | O |
| HETATM14098 | O | HOH | 1806 | -15.027 | 76.961 | 44.551 | 1.00 | 44.79 | O |
| HETATM14099 | O | HOH | 1807 | 2.339 | 38.197 | 59.411 | 1.00 | 30.62 | O |
| HETATM14100 | O | HOH | 1808 | -14.353 | 76.937 | 82.210 | 1.00 | 45.50 | O |
| HETATM14101 | O | HOH | 1809 | 16.015 | 76.941 | 82.812 | 1.00 | 33.54 | O |
| HETATM14102 | O | HOH | 1810 | 25.986 | 51.660 | 19.314 | 1.00 | 33.50 | O |
| HETATM14103 | O | HOH | 1811 | 14.914 | 54.059 | 37.825 | 1.00 | 32.21 | O |
| HETATM14104 | O | HOH | 1812 | 16.214 | 79.310 | 33.083 | 1.00 | 44.74 | O |
| HETATM14105 | O | HOH | 1813 | -13.257 | 55.059 | 52.242 | 1.00 | 44.86 | O |
| HETATM14106 | O | HOH | 1814 | -3.503 | 58.902 | 56.493 | 1.00 | 31.90 | O |
| HETATM14107 | O | HOH | 1815 | 17.743 | 62.759 | 25.526 | 1.00 | 41.59 | O |
| HETATM14108 | O | HOH | 1816 | 17.231 | 67.104 | 93.263 | 1.00 | 36.44 | O |
| HETATM14109 | O | HOH | 1817 | 11.712 | 74.433 | 84.337 | 1.00 | 41.14 | O |
| HETATM14110 | O | HOH | 1818 | -2.462 | 36.371 | 46.798 | 1.00 | 40.86 | O |
| HETATM14111 | O | HOH | 1819 | 26.847 | 67.542 | 56.343 | 1.00 | 35.71 | O |
| HETATM14112 | O | HOH | 1820 | 17.070 | 64.995 | 57.739 | 1.00 | 44.59 | O |
| HETATM14113 | O | HOH | 1821 | 33.767 | 82.197 | 85.079 | 1.00 | 35.12 | O |
| HETATM14114 | O | HOH | 1822 | -17.909 | 56.259 | 85.473 | 1.00 | 41.37 | O |
| HETATM14115 | O | HOH | 1823 | 35.600 | 38.951 | 32.074 | 1.00 | 46.60 | O |
| HETATM14116 | O | HOH | 1824 | 15.707 | 72.428 | 89.110 | 1.00 | 43.65 | O |
| HETATM14117 | O | HOH | 1825 | 2.454 | 89.892 | 38.630 | 1.00 | 37.38 | O |
| HETATM14118 | O | HOH | 1826 | 28.069 | 97.411 | 71.924 | 1.00 | 48.38 | O |
| HETATM14119 | O | HOH | 1827 | 35.729 | 82.902 | 68.447 | 1.00 | 46.15 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM14120 | O | HOH | 1828 | 18.203 | 24.110 | 68.814 | 1.00 | 34.79 | O |
| HETATM14121 | O | HOH | 1829 | -9.701 | 85.457 | 78.536 | 1.00 | 44.14 | O |
| HETATM14122 | O | HOH | 1830 | 13.866 | 72.798 | 56.932 | 1.00 | 45.50 | O |
| HETATM14123 | O | HOH | 1831 | -10.653 | 38.964 | 48.913 | 1.00 | 34.15 | O |
| HETATM14124 | O | HOH | 1832 | 29.949 | 50.034 | 22.961 | 1.00 | 42.64 | O |
| HETATM14125 | O | HOH | 1833 | 43.363 | 44.954 | 51.397 | 1.00 | 39.25 | O |
| HETATM14126 | O | HOH | 1834 | 43.671 | 44.235 | 47.070 | 1.00 | 44.66 | O |
| HETATM14127 | O | HOH | 1835 | 16.190 | 46.178 | 25.308 | 1.00 | 42.89 | O |
| HETATM14128 | O | HOH | 1836 | 22.822 | 77.090 | 32.652 | 1.00 | 37.83 | O |
| HETATM14129 | O | HOH | 1837 | 24.997 | 61.184 | 87.758 | 1.00 | 34.76 | O |
| HETATM14130 | O | HOH | 1838 | 53.906 | 66.546 | 47.111 | 1.00 | 38.80 | O |
| HETATM14131 | O | HOH | 1839 | 9.297 | 65.522 | 94.252 | 1.00 | 35.77 | O |
| HETATM14132 | O | HOH | 1840 | 21.155 | 54.565 | 35.408 | 1.00 | 46.32 | O |
| HETATM14133 | O | HOH | 1841 | 20.921 | 32.427 | 70.763 | 1.00 | 41.15 | O |
| HETATM14134 | O | HOH | 1842 | -8.753 | 87.802 | 42.252 | 1.00 | 39.70 | O |
| HETATM14135 | O | HOH | 1843 | 16.324 | 27.310 | 48.113 | 1.00 | 39.98 | O |
| HETATM14136 | O | HOH | 1844 | -24.307 | 74.339 | 64.474 | 1.00 | 35.01 | O |
| HETATM14137 | O | HOH | 1845 | -5.752 | 33.633 | 81.979 | 1.00 | 44.67 | O |
| HETATM14138 | O | HOH | 1846 | 14.387 | 57.771 | 41.459 | 1.00 | 36.81 | O |
| HETATM14139 | O | HOH | 1847 | 36.489 | 71.883 | 61.207 | 1.00 | 30.99 | O |
| HETATM14140 | O | HOH | 1848 | 31.508 | 38.636 | 75.089 | 1.00 | 38.01 | O |
| HETATM14141 | O | HOH | 1849 | 13.719 | 23.079 | 68.692 | 1.00 | 35.29 | O |
| HETATM14142 | O | HOH | 1850 | -1.662 | 53.054 | 20.069 | 1.00 | 41.28 | O |
| HETATM14143 | O | HOH | 1851 | 32.649 | 70.632 | 50.779 | 1.00 | 44.97 | O |
| HETATM14144 | O | HOH | 1852 | -1.362 | 37.801 | 97.579 | 1.00 | 42.66 | O |
| HETATM14145 | O | HOH | 1853 | 9.058 | 90.588 | 88.546 | 1.00 | 37.31 | O |
| HETATM14146 | O | HOH | 1854 | 4.808 | 75.732 | 74.897 | 1.00 | 43.02 | O |
| HETATM14147 | O | HOH | 1855 | 4.309 | 45.315 | 38.008 | 1.00 | 36.46 | O |
| HETATM14148 | O | HOH | 1856 | 11.168 | 57.558 | 12.658 | 1.00 | 39.61 | O |
| HETATM14149 | O | HOH | 1857 | -15.255 | 51.565 | 53.308 | 1.00 | 41.59 | O |
| HETATM14150 | O | HOH | 1858 | -14.952 | 73.443 | 26.305 | 1.00 | 51.65 | O |
| HETATM14151 | O | HOH | 1859 | -2.152 | 32.413 | 92.171 | 1.00 | 43.39 | O |
| HETATM14152 | O | HOH | 1860 | 16.568 | 65.467 | 25.961 | 1.00 | 41.62 | O |
| HETATM14153 | O | HOH | 1861 | -12.899 | 38.150 | 79.198 | 1.00 | 38.01 | O |
| HETATM14154 | O | HOH | 1862 | 11.855 | 22.430 | 54.721 | 1.00 | 41.88 | O |
| HETATM14155 | O | HOH | 1863 | -5.130 | 48.219 | 51.945 | 1.00 | 36.99 | O |
| HETATM14156 | O | HOH | 1864 | 29.393 | 23.980 | 53.952 | 1.00 | 35.32 | O |
| HETATM14157 | O | HOH | 1865 | -0.996 | 40.543 | 98.031 | 1.00 | 44.89 | O |
| HETATM14158 | O | HOH | 1866 | 24.848 | 23.251 | 72.141 | 1.00 | 40.29 | O |
| HETATM14159 | O | HOH | 1867 | 11.805 | 79.516 | 79.960 | 1.00 | 41.31 | O |
| HETATM14160 | O | HOH | 1868 | 31.519 | 54.492 | 32.710 | 1.00 | 46.44 | O |
| HETATM14161 | O | HOH | 1869 | 33.775 | 90.487 | 75.533 | 1.00 | 47.61 | O |
| HETATM14162 | O | HOH | 1870 | 4.150 | 61.796 | 53.392 | 1.00 | 38.41 | O |
| HETATM14163 | O | HOH | 1871 | 6.490 | 25.834 | 56.027 | 1.00 | 45.55 | O |
| HETATM14164 | O | HOH | 1872 | 25.601 | 57.964 | 87.429 | 1.00 | 36.47 | O |
| HETATM14165 | O | HOH | 1873 | 36.701 | 54.580 | 72.836 | 1.00 | 45.66 | O |
| HETATM14166 | O | HOH | 1874 | 3.793 | 24.234 | 63.641 | 1.00 | 37.70 | O |
| HETATM14167 | O | HOH | 1875 | -0.622 | 86.383 | 97.169 | 1.00 | 43.94 | O |
| HETATM14168 | O | HOH | 1876 | -4.797 | 67.577 | 96.148 | 1.00 | 41.44 | O |
| HETATM14169 | O | HOH | 1877 | 25.015 | 50.445 | 31.347 | 1.00 | 39.90 | O |
| HETATM14170 | O | HOH | 1878 | 13.153 | 50.888 | 43.311 | 1.00 | 37.60 | O |
| HETATM14171 | O | HOH | 1879 | 5.206 | 62.927 | 58.574 | 1.00 | 42.95 | O |
| HETATM14172 | O | HOH | 1880 | 10.656 | 33.304 | 87.753 | 1.00 | 45.28 | O |
| HETATM14173 | O | HOH | 1881 | 34.445 | 58.897 | 87.363 | 1.00 | 45.09 | O |
| HETATM14174 | O | HOH | 1882 | -9.001 | 77.322 | 94.769 | 1.00 | 47.61 | O |
| HETATM14175 | O | HOH | 1883 | 44.412 | 56.189 | 37.610 | 1.00 | 48.20 | O |
| HETATM14176 | O | HOH | 1884 | 3.201 | 62.841 | 63.722 | 1.00 | 38.14 | O |
| HETATM14177 | O | HOH | 1885 | 20.809 | 53.723 | 88.691 | 1.00 | 34.65 | O |
| HETATM14178 | O | HOH | 1886 | -2.850 | 33.633 | 72.968 | 1.00 | 47.05 | O |
| HETATM14179 | O | HOH | 1887 | 14.538 | 70.471 | 55.682 | 1.00 | 41.63 | O |
| HETATM14180 | O | HOH | 1888 | 19.855 | 77.699 | 45.126 | 1.00 | 39.37 | O |
| HETATM14181 | O | HOH | 1889 | 6.080 | 72.649 | 57.607 | 1.00 | 44.51 | O |
| HETATM14182 | O | HOH | 1890 | 23.929 | 66.023 | 59.155 | 1.00 | 46.39 | O |
| HETATM14183 | O | HOH | 1891 | -10.964 | 84.167 | 72.256 | 1.00 | 40.69 | O |
| HETATM14184 | O | HOH | 1892 | 37.625 | 87.817 | 82.807 | 1.00 | 45.63 | O |
| HETATM14185 | O | HOH | 1893 | 44.163 | 72.246 | 45.263 | 1.00 | 43.07 | O |
| HETATM14186 | O | HOH | 1894 | 7.931 | 56.056 | 61.819 | 1.00 | 38.19 | O |
| HETATM14187 | O | HOH | 1895 | 36.164 | 63.289 | 82.700 | 1.00 | 46.57 | O |
| HETATM14188 | O | HOH | 1896 | -21.572 | 78.626 | 73.525 | 1.00 | 44.69 | O |
| HETATM14189 | O | HOH | 1897 | 20.005 | 83.498 | 22.610 | 1.00 | 43.81 | O |
| HETATM14190 | O | HOH | 1898 | 8.508 | 65.790 | 57.686 | 1.00 | 39.61 | O |
| HETATM14191 | O | HOH | 1899 | 15.288 | 111.209 | 64.721 | 1.00 | 46.33 | O |
| HETATM14192 | O | HOH | 1900 | 50.100 | 72.320 | 48.689 | 1.00 | 33.84 | O |
| HETATM14193 | O | HOH | 1901 | 27.201 | 63.304 | 71.875 | 1.00 | 46.64 | O |
| HETATM14194 | O | HOH | 1902 | -8.491 | 70.240 | 19.431 | 1.00 | 41.58 | O |
| HETATM14195 | O | HOH | 1903 | 20.683 | 30.477 | 43.789 | 1.00 | 37.64 | O |
| HETATM14196 | O | HOH | 1904 | -10.829 | 75.790 | 90.976 | 1.00 | 39.14 | O |
| HETATM14197 | O | HOH | 1905 | 16.628 | 40.931 | 92.157 | 1.00 | 39.35 | O |
| HETATM14198 | O | HOH | 1906 | -14.995 | 79.712 | 33.773 | 1.00 | 43.50 | O |
| HETATM14199 | O | HOH | 1907 | -9.293 | 55.640 | 17.580 | 1.00 | 44.22 | O |

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|---|---|---|---|---|---|---|---|---|---|
| HETATM14200 | O | HOH | 1908 | 36.451 | 84.884 | 66.359 | 1.00 | 42.17 | O |
| HETATM14201 | O | HOH | 1909 | 6.399 | 24.229 | 65.342 | 1.00 | 37.02 | O |
| HETATM14202 | O | HOH | 1910 | -20.549 | 59.127 | 64.948 | 1.00 | 43.90 | O |
| HETATM14203 | O | HOH | 1911 | 34.877 | 39.998 | 27.327 | 1.00 | 42.72 | O |
| HETATM14204 | O | HOH | 1912 | -17.544 | 54.764 | 71.756 | 1.00 | 38.21 | O |
| HETATM14205 | O | HOH | 1913 | -6.954 | 53.489 | 34.319 | 1.00 | 37.63 | O |
| HETATM14206 | O | HOH | 1914 | 14.769 | 53.122 | 43.066 | 1.00 | 38.73 | O |
| HETATM14207 | O | HOH | 1915 | 17.804 | 68.700 | 63.834 | 1.00 | 42.88 | O |
| HETATM14208 | O | HOH | 1916 | 5.992 | 73.109 | 81.477 | 1.00 | 43.50 | O |
| HETATM14209 | O | HOH | 1917 | 37.662 | 67.320 | 56.667 | 1.00 | 36.62 | O |
| HETATM14210 | O | HOH | 1918 | 48.771 | 54.158 | 48.413 | 1.00 | 42.42 | O |
| HETATM14211 | O | HOH | 1919 | 23.171 | 85.123 | 89.623 | 1.00 | 46.21 | O |
| HETATM14212 | O | HOH | 1920 | 25.094 | 39.008 | 31.623 | 1.00 | 31.35 | O |
| HETATM14213 | O | HOH | 1921 | 29.965 | 86.474 | 56.080 | 1.00 | 34.97 | O |
| HETATM14214 | O | HOH | 1922 | 32.007 | 94.787 | 80.103 | 1.00 | 41.75 | O |
| HETATM14215 | O | HOH | 1923 | 26.531 | 57.510 | 33.414 | 1.00 | 44.65 | O |
| HETATM14216 | O | HOH | 1924 | 13.601 | 92.968 | 31.617 | 1.00 | 42.17 | O |
| HETATM14217 | O | HOH | 1925 | 16.597 | 51.885 | 38.343 | 1.00 | 38.79 | O |
| HETATM14218 | O | HOH | 1926 | 26.749 | 90.131 | 44.416 | 1.00 | 45.69 | O |
| HETATM14219 | O | HOH | 1927 | 35.070 | 78.062 | 85.531 | 1.00 | 38.83 | O |
| HETATM14220 | O | HOH | 1928 | -21.558 | 71.059 | 77.539 | 1.00 | 41.41 | O |
| HETATM14221 | O | HOH | 1929 | 41.015 | 31.813 | 48.864 | 1.00 | 41.35 | O |
| HETATM14222 | O | HOH | 1930 | 32.503 | 81.407 | 50.048 | 1.00 | 41.85 | O |
| HETATM14223 | O | HOH | 1931 | 25.310 | 45.134 | 86.636 | 1.00 | 49.07 | O |
| HETATM14224 | O | HOH | 1932 | 9.423 | 43.119 | 17.983 | 1.00 | 39.15 | O |
| HETATM14225 | O | HOH | 1933 | -23.236 | 76.221 | 66.177 | 1.00 | 31.64 | O |
| HETATM14226 | O | HOH | 1934 | -9.366 | 66.786 | 16.390 | 1.00 | 35.66 | O |
| HETATM14227 | O | HOH | 1935 | 10.614 | 74.976 | 52.222 | 1.00 | 40.57 | O |
| HETATM14228 | O | HOH | 1936 | -8.840 | 82.960 | 56.703 | 1.00 | 40.71 | O |
| HETATM14229 | O | HOH | 1937 | 23.540 | 66.026 | 62.961 | 1.00 | 48.22 | O |
| HETATM14230 | O | HOH | 1938 | 0.071 | 94.812 | 21.492 | 1.00 | 39.38 | O |
| HETATM14231 | O | HOH | 1939 | 13.499 | 83.770 | 98.106 | 1.00 | 42.90 | O |
| HETATM14232 | O | HOH | 1940 | -13.142 | 43.124 | 61.262 | 1.00 | 50.37 | O |
| HETATM14233 | O | HOH | 1941 | 27.384 | 56.708 | 24.236 | 1.00 | 47.15 | O |
| HETATM14234 | O | HOH | 1942 | 28.235 | 68.372 | 88.646 | 1.00 | 39.88 | O |
| HETATM14235 | O | HOH | 1943 | -13.976 | 83.787 | 68.338 | 1.00 | 41.75 | O |
| HETATM14236 | O | HOH | 1944 | 8.968 | 77.174 | 85.765 | 1.00 | 50.28 | O |
| HETATM14237 | O | HOH | 1945 | 3.601 | 55.609 | 14.986 | 1.00 | 40.50 | O |
| HETATM14238 | O | HOH | 1946 | 8.792 | 75.875 | 83.410 | 1.00 | 37.59 | O |
| HETATM14239 | O | HOH | 1947 | 32.695 | 72.702 | 35.421 | 1.00 | 47.37 | O |
| HETATM14240 | O | HOH | 1948 | 39.164 | 73.452 | 60.341 | 1.00 | 35.23 | O |
| HETATM14241 | O | HOH | 1949 | -14.599 | 85.875 | 25.835 | 1.00 | 42.42 | O |
| HETATM14242 | O | HOH | 1950 | 19.589 | 78.204 | 90.511 | 1.00 | 44.48 | O |
| HETATM14243 | O | HOH | 1951 | 47.226 | 46.597 | 43.851 | 1.00 | 42.84 | O |
| HETATM14244 | O | HOH | 1952 | 7.801 | 94.005 | 31.757 | 1.00 | 34.32 | O |
| HETATM14245 | O | HOH | 1953 | 37.669 | 49.929 | 86.239 | 1.00 | 47.11 | O |
| HETATM14246 | O | HOH | 1954 | 13.002 | 68.224 | 81.437 | 1.00 | 45.22 | O |
| HETATM14247 | O | HOH | 1955 | 11.753 | 62.391 | 56.203 | 1.00 | 40.65 | O |
| HETATM14248 | O | HOH | 1956 | 6.480 | 56.168 | 96.437 | 1.00 | 43.62 | O |
| HETATM14249 | O | HOH | 1957 | 0.083 | 36.699 | 37.477 | 1.00 | 38.57 | O |
| HETATM14250 | O | HOH | 1958 | -10.153 | 86.070 | 65.992 | 1.00 | 43.07 | O |
| HETATM14251 | O | HOH | 1959 | 22.547 | 78.144 | 86.996 | 1.00 | 48.79 | O |
| HETATM14252 | O | HOH | 1960 | 11.355 | 48.944 | 36.431 | 1.00 | 30.49 | O |
| HETATM14253 | O | HOH | 1961 | -7.812 | 48.427 | 102.033 | 1.00 | 44.11 | O |
| HETATM14254 | O | HOH | 1962 | 11.832 | 66.281 | 95.106 | 1.00 | 47.08 | O |
| HETATM14255 | O | HOH | 1963 | 23.464 | 29.031 | 45.888 | 1.00 | 47.36 | O |
| HETATM14256 | O | HOH | 1964 | 20.655 | 24.395 | 67.841 | 1.00 | 43.49 | O |
| HETATM14257 | O | HOH | 1965 | -8.424 | 59.594 | 101.728 | 1.00 | 40.47 | O |
| HETATM14258 | O | HOH | 1966 | 22.379 | 99.590 | 41.767 | 1.00 | 45.16 | O |
| HETATM14259 | O | HOH | 1967 | 3.637 | 36.065 | 42.036 | 1.00 | 37.28 | O |
| HETATM14260 | O | HOH | 1968 | 23.577 | 88.427 | 37.270 | 1.00 | 48.11 | O |
| HETATM14261 | O | HOH | 1969 | 38.887 | 50.781 | 45.096 | 1.00 | 48.74 | O |
| HETATM14262 | O | HOH | 1970 | 34.159 | 25.291 | 65.643 | 1.00 | 39.38 | O |
| HETATM14263 | O | HOH | 1971 | -3.572 | 80.424 | 81.461 | 1.00 | 45.55 | O |
| HETATM14264 | O | HOH | 1972 | 7.184 | 31.007 | 86.266 | 1.00 | 41.89 | O |
| HETATM14265 | O | HOH | 1973 | 25.509 | 53.859 | 38.767 | 1.00 | 39.29 | O |
| HETATM14266 | O | HOH | 1974 | -9.725 | 89.534 | 52.195 | 1.00 | 45.09 | O |
| HETATM14267 | O | HOH | 1975 | -3.115 | 39.069 | 41.198 | 1.00 | 42.23 | O |
| HETATM14268 | O | HOH | 1976 | 3.558 | 96.400 | 35.787 | 1.00 | 46.77 | O |
| HETATM14269 | O | HOH | 1977 | -5.778 | 78.921 | 81.317 | 1.00 | 47.22 | O |
| HETATM14270 | O | HOH | 1978 | -12.957 | 66.927 | 20.107 | 1.00 | 40.64 | O |
| HETATM14271 | O | HOH | 1979 | 3.905 | 33.270 | 45.282 | 1.00 | 40.39 | O |
| HETATM14272 | O | HOH | 1980 | 36.770 | 75.948 | 85.259 | 1.00 | 45.04 | O |
| HETATM14273 | O | HOH | 1981 | 22.774 | 52.348 | 38.862 | 1.00 | 40.92 | O |
| HETATM14274 | O | HOH | 1982 | 25.890 | 38.591 | 34.200 | 1.00 | 48.70 | O |
| HETATM14275 | O | HOH | 1983 | 17.332 | 33.635 | 77.416 | 1.00 | 34.25 | O |
| HETATM14276 | O | HOH | 1984 | 17.829 | 64.788 | 85.244 | 1.00 | 39.29 | O |
| HETATM14277 | O | HOH | 1985 | 42.939 | 52.736 | 59.524 | 1.00 | 47.73 | O |
| HETATM14278 | O | HOH | 1986 | 40.084 | 64.098 | 49.820 | 1.00 | 44.65 | O |
| HETATM14279 | O | HOH | 1987 | 16.402 | 60.452 | 9.914 | 1.00 | 43.75 | O |

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HETATM14280  O   HOH  1988      28.775  71.429  89.468  1.00 45.20           O
HETATM14281  O   HOH  1989      22.021  78.588  89.641  1.00 40.32           O
HETATM14282  O   HOH  1990     -22.661  41.576  46.828  1.00 45.00           O
HETATM14283  O   HOH  1991      26.789  71.319  32.537  1.00 43.30           O
HETATM14284  O   HOH  1992      42.962  83.114  70.491  1.00 40.99           O
HETATM14285  O   HOH  1993     -11.335  41.032  69.131  1.00 45.62           O
HETATM14286  O   HOH  1994      39.618  77.197  66.099  1.00 50.07           O
HETATM14287  O   HOH  1995      19.426  62.420  91.404  1.00 40.39           O
HETATM14288  O   HOH  1996       6.432  33.893  77.988  1.00 38.10           O
HETATM14289  O   HOH  1997      -1.633  67.493  95.972  1.00 44.64           O
HETATM14290  O   HOH  1998     -25.029  76.642  74.265  1.00 47.01           O
HETATM14291  O   HOH  1999     -17.099  56.887  59.919  1.00 41.05           O
HETATM14292  O   HOH  2000       3.280  72.108  82.073  1.00 43.70           O
HETATM14293  O   HOH  2001     -18.421  65.536  59.205  1.00 32.05           O
HETATM14294  O   HOH  2002      20.355  42.752  90.879  1.00 38.80           O
HETATM14295  O   HOH  2003      12.426  28.604  45.295  1.00 44.87           O
HETATM14296  O   HOH  2004      42.549  75.417  50.385  1.00 42.46           O
HETATM14297  O   HOH  2005       2.901  59.230 102.478  1.00 43.78           O
HETATM14298  O   HOH  2006       3.669  60.181  57.302  1.00 48.48           O
HETATM14299  O   HOH  2007      -1.520  34.586  49.104  1.00 43.42           O
HETATM14300  O   HOH  2008      16.137  98.564  43.037  1.00 45.51           O
HETATM14301  O   HOH  2009       4.284  44.630  97.100  1.00 47.78           O
HETATM14302  O   HOH  2010      -7.233  92.448  68.365  1.00 47.75           O
HETATM14303  O   HOH  2011       6.251  60.401  58.037  1.00 40.48           O
HETATM14304  O   HOH  2012       6.936  74.417  75.974  1.00 39.45           O
HETATM14305  O   HOH  2013      29.023 102.435  64.899  1.00 46.53           O
HETATM14306  O   HOH  2014       6.314  90.526  24.232  1.00 47.54           O
HETATM14307  O   HOH  2015     -12.724  67.386  94.605  1.00 43.93           O
HETATM14308  O   HOH  2016      28.574  86.856  53.433  1.00 41.16           O
HETATM14309  O   HOH  2017      19.589  84.950  32.100  1.00 35.95           O
HETATM14310  O   HOH  2018      29.450  41.093  78.097  1.00 45.40           O
HETATM14311  O   HOH  2019      -6.888  41.669  95.864  1.00 43.43           O
HETATM14312  O   HOH  2020      19.356  98.388  87.492  1.00 41.91           O
HETATM14313  O   HOH  2021      21.575  68.558  61.854  1.00 40.53           O
HETATM14314  O   HOH  2022      44.888  62.245  40.567  1.00 41.98           O
HETATM14315  O   HOH  2023      18.575 109.957  57.824  1.00 42.65           O
HETATM14316  O   HOH  2024      27.170  78.696  34.591  1.00 40.37           O
HETATM14317  O   HOH  2025      29.015  66.250  28.924  1.00 40.95           O
HETATM14318  O   HOH  2026      -1.942  63.052  58.835  1.00 42.05           O
HETATM14319  O   HOH  2027      11.141  35.700  36.698  1.00 50.96           O
HETATM14320  O   HOH  2028      37.721  52.608  86.315  1.00 41.80           O
HETATM14321  O   HOH  2029      42.269  72.979  84.877  1.00 38.70           O
HETATM14322  O   HOH  2030      40.806  33.295  38.588  1.00 47.27           O
HETATM14323  O   HOH  2031       3.114  79.577  16.610  1.00 38.71           O
HETATM14324  O   HOH  2032      33.706  34.905  31.253  1.00 43.48           O
HETATM14325  O   HOH  2033      33.650  55.868  77.597  1.00 40.21           O
HETATM14326  O   HOH  2034      11.794  35.018  27.135  1.00 42.46           O
HETATM14327  O   HOH  2035       3.757  29.008  93.528  1.00 45.65           O
HETATM14328  O   HOH  2036      29.771  53.287  88.824  1.00 43.56           O
HETATM14329  O   HOH  2037     -11.238  53.854  28.004  1.00 49.86           O
HETATM14330  O   HOH  2038      29.618  49.642  25.790  1.00 45.69           O
HETATM14331  O   HOH  2039      -6.523  84.241  56.614  1.00 48.32           O
HETATM14332  O   HOH  2040     -17.708  53.576  82.453  1.00 38.72           O
HETATM14333  O   HOH  2041      24.489  57.869  31.672  1.00 48.32           O
HETATM14334  O   HOH  2042      23.770  53.631  33.259  1.00 43.33           O
HETATM14335  O   HOH  2043      11.377  67.458  15.635  1.00 54.11           O
HETATM14336  O   HOH  2044      -2.135  33.520  66.556  1.00 42.94           O
HETATM14337  O   HOH  2045       4.868  97.669  75.447  1.00 40.47           O
HETATM14338  O   HOH  2046     -12.794  72.161  89.045  1.00 45.69           O
HETATM14339  O   HOH  2047      31.451  28.220  67.270  1.00 37.03           O
HETATM14340  O   HOH  2048      45.464  75.440  82.304  1.00 44.66           O
HETATM14341  O   HOH  2049      -7.336  40.344  57.744  1.00 34.20           O
HETATM14342  O   HOH  2050      17.119  34.450  74.806  1.00 48.02           O
HETATM14343  O   HOH  2051      35.098  67.290  39.413  1.00 39.73           O
HETATM14344  O   HOH  2052      -8.784  80.199  85.204  1.00 40.74           O
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